

Industrial relations and social dialogue

Minimum wages: Non-compliance and enforcement across EU Member States – Comparative report



Minimum wages: Non-compliance and enforcement across EU Member States – Comparative report

Research described in this report has been carried out in the context of the pilot project 'Role of the minimum wage in establishing the Universal Labour Guarantee'. This project was proposed by the European Parliament and delegated to Eurofound by the European Commission's Directorate-General for Employment, Social Affairs and Inclusion.



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Eurofound (2023), *Minimum wages: Non-compliance and enforcement across EU Member States – Comparative report*, Publications Office of the European Union, Luxembourg.

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Acknowledgements: The project was informed by and benefited greatly from the contributions of an expert group composed of representatives of national social partners and governments (nominated by Eurofound's tripartite Executive Board), international organisations, practitioners in the field of enforcement, research institutes and the European Commission. Eurofound is grateful for their valuable inputs, which helped shape and improve the project during its development and execution. (See Annex 2.6 for a list of participants in the expert group.)

Research project: 210206

Luxembourg: Publications Office of the European Union, 2023

PDF ISBN 978-92-897-2349-7 doi:10.2806/474422 TJ-05-23-303-EN-N

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Country codes

AT	Austria	FI	Finland	NL	Netherlands
BE	Belgium	FR	France	PL	Poland
BG	Bulgaria	HR	Croatia	PT	Portugal
CY	Cyprus	HU	Hungary	RO	Romania
CZ	Czechia	IE	Ireland	SE	Sweden
DE	Germany	IT	Italy	SI	Slovenia
DK	Denmark	LT	Lithuania	SK	Slovakia
EE	Estonia	LU	Luxembourg		
EL	Greece	LV	Latvia		
ES	Spain	MT	Malta	UK	United Kingdom

Executive summary

Introduction

In 2020, the European Parliament requested the European Commission to carry out a pilot project on the 'Role of the minimum wage in establishing the Universal Labour Guarantee'. Eurofound was entrusted with the implementation of this pilot project (2021–2023). This module examines non-compliance with minimum wage legislation and how Member States approach enforcement.

Minimum wage-setting mechanisms represent a powerful labour market tool. They are binding, and their implementation is widespread across European countries. To design and pursue sound strategies and measures for compliance with and enforcement of minimum wages, it is important to analyse the extent and patterns of non-compliance in as much detail as the available data permit. This is relevant not only to enhancing the effectiveness of interventions but also to making strategic choices in allocating available public resources. Measuring non-compliance is not easy and requires the use of precise information on income and on minimum wage levels, which is often difficult to obtain, as in countries where pay floors are set through collective bargaining at sectoral level such information is seldom available or can be difficult to recover. Enforcing minimum wages is essential, and understanding how enforcement affects compliance is crucial for policymaking. However, data on enforcement and compliance are scarce, and comparison across countries is difficult.

Policy context

- In the EU, the European Parliament and European Council adopted the Directive on adequate minimum wages on 19 October 2022.
- Of the 27 Member States, 22 establish statutory minimum wages at national level, and the others have sector-level bargaining.
- Compliance with minimum wage regulation is fundamental to guarantee workers' rights, their protection in the labour market, a level playing field for business and fair competition.
- In 22 EU countries, the enforcement of minimum wages is included in overarching labour regulations. Some countries have specific regulations or procedures for those industries/sectors, territorial areas or workers that present, or are expected to present, a higher incidence of non-compliance.

Key findings

- The estimated levels of non-compliance with the minimum wage legislation depend crucially on the source of data. Estimates of non-compliance are to

be taken as approximations, not precise numbers. When using the Structure of Earnings Survey, which covers only larger firms and uses income information reported by employers, non-compliance levels tend to be generally quite low. When using European Union Statistics on Income and Living Conditions, which covers the entire working-age population, and in which workers report their own incomes, non-compliance levels tend to be higher.

- Non-compliance is positively correlated with the Kaitz index (ratio of the minimum wage to the average/median wage), suggesting that it is higher when the minimum wage is set higher.
- Non-compliance rates are higher than the median level according to both surveys in Cyprus, Denmark, Estonia, France, Germany, Hungary, Luxembourg and Spain. Non-compliance levels are consistently lower than the median in Belgium, Bulgaria, Croatia, Finland, Latvia, Malta, Poland, Portugal and Slovakia.
- Workers paid less than the minimum wage are generally younger and less educated, and more likely to be female, on a fixed-term or part-time contract and employed by smaller firms. The services sectors are generally more affected by this phenomenon than manufacturing.
- Non-compliance is much more common among employees working shorter working hours, which could reflect a low level of attachment to the labour market. Non-compliance is also higher when estimated using hourly instead of monthly wages. That could be because some employers may comply with monthly minimum wages but make employees work more hours than stated in their contracts, so they do not comply with hourly minimum wages.
- In most countries, generalist institutions in charge of labour law enforcement and dealing with the whole spectrum of labour laws enforce minimum wages.
- Labour inspectorates are the main institutions involved in minimum wage enforcement in 19 countries, together – to varying degrees and in different ways – with labour courts, and tax and social insurance authorities. Three countries have more than one institution directly responsible for enforcing minimum wages.
- Social partners play a key role in enforcing minimum wage regulations. In Nordic countries they have a direct inspection role to enforce the application of collective agreements. In the other Member States they often provide guidance and support to workers and employers, with roles in dispute resolution and policymaking.
- The strategies to enforce minimum wages are increasingly based on balancing deterrence with

prevention. There is also growing attention to the advisory, guidance and informative role of inspectorates, and to the use of incentives for employers, information and awareness-raising campaigns, and data sharing.

- In the last decade, several Member States have made major reforms to enforcement systems and regulations: changing enforcement regulations; reforming labour inspectorates; changing the type and intensity of sanctions and access to information and data sharing on non-compliance; and creating competent groups/commissions for minimum wage enforcement.
- A set of mechanisms – exchange of information and coordination of relevant stakeholders, use of naming and shaming, use of chain liability, empowerment of workers – are effective in contexts characterised by highly at-risk economic sectors, complex bureaucratic procedures and limited human resources. Likewise, a holistic approach combining deterrence and preventive measures, an extensive scope of subcontracting chain liability and a pre-existing culture of partnership influence the way in which authorities act and reach outcomes.
- In the absence of specific systems for enforcing minimum wages in most countries, labour inspectorates increasingly use indirect strategies that increase the probability of compliance. By doing so, they aim to support three main groups during the process: workers, employers and authorities. A combination of soft initiatives with tougher measures has been shown to increase the effectiveness of inspectorates' actions when enforcing minimum wages.

Policy pointers

- Quantifying non-compliance is a challenging task that crucially depends on the quality and characteristics of the data used. To improve our knowledge of this phenomenon, more harmonised, comprehensive and precise data sources on income at EU level should be made available to researchers. Efforts should also be made to recover better information on the legal pay floors set by collective bargaining, typically set at industry level by trade unions and employers' associations. This information is generally lacking and not easily accessible.
- In recent years, labour market deregulation and new forms of work have made identifying non-compliance and enforcement more complex than in the past. Greater attention should be given to the use of data mining, the provision of guidance to workers and employers, and strengthened cooperation with the social partners and other institutions in enforcement activities.
- Although financial allocations for enforcement institutions have increased over the last decade in many Member States, and the number of inspectors increased in half of the countries for which data are available, resources are still only partially adequate for effective enforcement activities in many countries. More financial resources and trained staff are necessary to improve the labour inspectorates' capacity to respond to recent labour market trends and risks.
- Cooperation with social partners and other institutions in enforcement activities improves the capacity to reach out to those beyond conventional inspections and to share information on compliance. Cooperation and mutual learning among enforcement institutions and the social partners at EU level should be strengthened.
- Deterrence and preventive measures complement each other and should be adopted together for effective enforcement strategies. In some countries, greater attention should also be paid to protecting workers against adverse treatment resulting from issuing a complaint.
- Evaluation of national interventions directly and/or indirectly addressing minimum wage compliance is key. It needs to be based on more structured and formalised data collection.

Introduction

Minimum wage-setting mechanisms represent a powerful labour market tool. They are binding, and their implementation is widespread across European countries: of the 27 Member States of the European Union in 2022, 22 have statutory minimum wages established at national level, and the others have minimum wages negotiated at sectoral level (Austria, Denmark, Finland, Italy and Sweden).¹ They establish the legal right of workers to ‘receive a minimum amount of remuneration for work performed during a given period, which cannot be reduced by collective agreement or an individual contract’ (ILO, undated), thus protecting workers against unduly low pay. At European level, minimum wages have over recent years become the focus of an important policy debate, which in October 2022 resulted in a new directive aimed at ensuring that workers in the EU are paid adequate minimum wages (Directive (EU) 2022/2041 of the European Parliament and of the Council of 19 October 2022 on adequate minimum wages in the European Union).

However, a difference between de jure and de facto regulation often exists, and the effective functioning of the minimum wage institution crucially relies on the enforcement of and compliance with minimum wage rates. Enhancing compliance with minimum wages is also a matter of social policy, since non-compliance represents a disadvantage for underpaid workers as well as for compliant firms.²

Data on non-compliance with minimum wage legislation can also inform policymakers of the quality of the enforcement and monitoring system, and more generally of the efficacy of the minimum wage policy in reducing unduly low pay. Compliance with the minimum wage and, more generally, the issue of enforcement are still rarely analysed. Moreover, existing evidence on non-compliance primarily focuses on minimum wages set at national level and only very little looks at minimum wage levels set in collective agreements, which in several European countries are the most important wage-setting institution.

It becomes apparent that to design, put in place and pursue sound strategies and measures for compliance and enforcement it is important to analyse the extent and patterns of non-compliance in a manner as detailed as the available data permit. This is relevant not only to enhancing the effectiveness of interventions but also to making strategic choices in allocating available public resources.

However, the measurement of non-compliance is a complex task. It requires precise information on wage income, which is often difficult to obtain for all EU Member States. A first limitation is that currently available harmonised datasets at EU level that provide

information on wage income differ regarding the way in which information on wage income is gathered and measured, sample size and coverage. A second challenge regards information on minimum wage levels in the EU27. While this information is currently available in countries with a government-legislated nationwide minimum wage, for countries where pay floors are set through collective agreements it is often unavailable or difficult to access. For these reasons, estimates of non-compliance are to be taken as approximations, not precise numbers.

The main sources of information on earnings used in this report to quantify non-compliance are the Structure of Earnings Survey (SES) and European Union Statistics on Income and Living Conditions (EU-SILC). Each of these databases provides harmonised cross-country information on earnings across EU countries, and both have advantages and limitations that are thoroughly discussed in the report. Information on nationwide minimum wage levels is derived from Eurostat. However, due to data limitations, this quantification of non-compliance should be considered an approximation rather than a precise point estimate.

The enforcement of minimum wages is essential for their effective implementation. However, as underlined by Bhorat et al (2019), while several studies have measured the levels of non-compliance, only a few provide empirical evidence on the enforcement mechanisms in place and on the effects of enforcement practices on compliance.

The (scarce) literature on enforcement strategies illustrates the diversity of approaches adopted in EU countries and underlines some dimensions to be considered in the mapping and assessment of enforcement strategies, including the tools, enforcement institutions and regulations Member States currently use to monitor, enforce and promote compliance with minimum wages; how enforcement institutions are resourced; the enforcement role of the social partners and other institutions and the cooperation mechanisms in place; the enforcement strategies adopted and the evolution over time of the balance between deterrence and preventive measures.

Most EU countries have ratified the 1947 International Labour Organization (ILO) Labour Inspection Convention and adopted it as a benchmark for the institutional set-up of national inspection systems; however, the structure and functions of enforcement institutions, their capacity and resources, the way they operate and coordinate with other organisations, and the roles of the social partners are very different across EU countries. Recent years have seen an increase in labour market deregulation and in the share of new forms of work (platform work, bogus

¹ Cyprus introduced a statutory minimum wage in January 2023. Nevertheless, when this study was conducted, Cyprus was considered among those few countries without a statutory minimum wage and where wage floors are exclusively negotiated at sectoral level. In fact it represented a hybrid case, since it had an occupation-specific statutory minimum wage underlying the collectively agreed levels.

² In this report ‘underpaid’ refers exclusively to those employees paid below the minimum wage.

self-employment, on-call work, agency work, etc.), making the identification of non-compliance and enforcement more complex than in the past, as underlined for example in the Network of Eurofound Correspondents reports on Cyprus, Greece, Portugal and Sweden. The ways in which labour inspectorates have been and are able to respond to these trends and risks depend on their legal jurisdictions, their functional combinations, and the available human and financial resources. Most EU countries are paying increasing attention to the use of data mining and risk assessment based on administrative data in collaboration with statistical offices and tax and social protection authorities. In addition, increasing attention is being paid to the advisory, guidance and informative role of inspectorates, and to the use of financial and non-financial incentives for compliant employers, the simplification of requirements and procedures, and information and awareness-raising campaigns. More recourse to partnership agreements with the social partners and other associations is also being had, to improve the capacity to reach out to those beyond the reach of conventional inspection activities.

The study also integrates the limited information available on minimum wage enforcement systems, providing a mapping and assessment of enforcement systems in the EU27, with a focus on the institutional and regulatory frameworks of national enforcement systems; the main enforcement institutions in each country and the way in which they operate; the role of social partners and coordination arrangements in place among different actors; and the enforcement strategies adopted and the combination of deterrence and preventive measures. The analysis is based on a review of the available comparative literature and data on national enforcement systems, and on fieldwork conducted in all the EU27 countries by the Network of Eurofound Correspondents, including interviews with national stakeholders (see the list of correspondents in Annex 2.5).

Furthermore, a policy analysis is carried out on 21 case studies in order to investigate the drivers of and

hindrances to policy measures aimed at enforcing minimum wages. Twenty-one measures were selected across EU countries in order to understand and identify specific patterns that help to explain the success or failure of these policy interventions. With this intent, the realist evaluation approach and context–mechanism–outcome (CMO) configuration, developed as an analytical tool by Pawson and Tilley (1997), are used. CMO configurations describe how specific contextual factors (C) work to trigger particular mechanisms (M), and how this combination generates various outcomes (O). By exploring these mechanisms of change, realist evaluations aim to understand how a programme works or is expected to work within specific contexts, and what conditions may hinder or promote successful outcomes (Pawson, 2006; Jagosh et al, 2011). The study uses this approach to identify particular patterns of interactions that emerge from the policy interventions.

The report is structured as follows.

Part 1 provides a comprehensive quantification of non-compliance with minimum wages using harmonised cross-country databases for the EU27 (namely EU-SILC and SES). A review of the scientific literature and datasets currently available for a cross-country analysis is also provided.

Part 2 provides a mapping and assessment of the enforcement systems implemented in the Member States to ensure the application of minimum wages, highlighting challenges and good practices on the basis of fieldwork conducted by the Network of Eurofound Correspondents.

Part 3 investigates the drivers of and hindrances to non-compliance with minimum wages, carrying out a policy analysis focusing on selected sectors compared across selected countries. The aim is to identify which policy measures appear to be working well in which context, and why or why not. This is fundamental to understand if a policy measure could be transferred to other countries and in what circumstances the policy could work elsewhere.

Part 1:
Estimating the magnitude of
compliance with minimum wages

Introduction

The objective of this part of the report is to provide a comprehensive quantification of non-compliance with minimum wages, using the best available harmonised cross-country databases for the EU Member States. The scientific literature and datasets currently available for a cross-country analysis are also reviewed. In this part we focus on non-compliance originating from work within the same country (not including, for example, posted workers) and covering only employees (not self-employed people).

Quantifying non-compliance with minimum wages is not an easy task. Estimates crucially depend on the quality of the available data (both on wages and on wage regulations), on the coverage of the sample, and on the estimation approach that is adopted. Estimates of non-compliance are to be taken as approximations, not precise numbers. In this report the estimation of non-compliance is carried out using two harmonised datasets that cover the EU27: the EU-SILC database and SES.

The analysis and quantification of non-compliance with minimum wages is structured as follows.

Chapter 1 provides a systematic review of the scientific literature on the extent of non-compliance with minimum wages, and the channels identified in the literature that firms can use to pay wages below the minimum.

Chapter 2 describes the data sources and provides an overview of existing harmonised EU-level databases on the labour force that can be useful for the purpose of estimating non-compliance rates from a cross-country perspective.

Chapter 3 is the core of Part 1 of the report, and provides a quantification of non-compliance with minimum wage regulations in the EU27. The results also focus on non-compliance rates by industry, by occupation and over time.

Chapter 4 discusses challenges, limitations and suggested improvements to make in data availability for the measurement of non-compliance rates.

Annex 1 is a methodological discussion paper titled [Approaches to estimating the magnitude of compliance with minimum wages](#) and complements this part of the report. It is presented as a working paper and is available on the 'Eurofound papers' tab of the publication web page. It is often cited in the text for extensive additional results, details of the methodology and the variables used for the quantification exercise.

1 Non-compliance with minimum wages: A literature review

Non-compliance with the minimum wage is generally defined as the share of workers who are paid below the statutory minimum wage. The issues of non-compliance and enforcement of minimum wages are still rarely analysed in the literature. Only a few studies focus on single European countries; even less is available providing cross-country analysis about Europe. Existing evidence primarily focuses on minimum wages set at national level, and only very few papers look at minimum wage levels set in collective agreements.

The first attempts to quantify non-compliance with minimum wages date back to the 1970s. Ashenfelter and Smith (1979) first investigated the issue of minimum wage compliance in the US, remarking that ‘in the midst of numerous studies intended to establish the quantitative effects of the minimum wage law, it is remarkable that no one has bothered to establish that this law actually affects wage rates [...] presumably reflecting the belief that employers fully comply with this law’ (pp. 333–334). This study found high levels of compliance in the US in the 1970s and pointed out the importance of research on minimum wages to comprehensively examine the issue of non-compliance.

While most of the policy debate and the economic literature on minimum wages focus on their employment effects, it should be kept in mind that compliance with minimum wages is crucial for their effective functioning and that non-compliance may have negative consequences not only for workers but also for employers, as it gives non-compliant firms an illegitimate cost advantage and may promote unfair competition. Given the multidimensional nature of non-compliance, several channels of underpayment are available to firms to achieve such a cost advantage (Garnero, 2018).

Firms can replace regularly paid employees with underpaid employees (not covered by minimum standards) or increase overtime hours without proper remuneration, or even assign workers to a lower occupational level than the correct one. Indeed, Rani et al (2013) did find evidence that in developing countries the rate of compliance is negatively related to the number of applicable minimum wages. In countries where wages are set by industry-wide agreements and there are no clear rules indicating who is entitled to bargain, firms can opt out, setting minimum wages below the existing ones (Lucifora and Vigani, 2021).

Existing estimates of non-compliance rates

A recent extensive study by the ILO (2021) finds that 266 million wage earners are paid less than the minimum wage, either because they are not legally covered or because of non-compliance.³ Although the effectiveness of minimum wages crucially depends on enforcement and compliance, empirical evidence of non-compliance is still scarce and mainly focused on developing countries (Ronconi, 2010; Kanbur et al, 2013; Rani et al, 2013; Ye et al, 2015; Bhorat et al, 2019; Mansoor and O’Neill, 2020). Most of these countries have non-compliance rates above 20%, but estimates vary widely from country to country, with figures as high as 80% for Mali (Bhorat et al, 2015) and lower than 5% for Argentina (Ronconi, 2010).

Evidence from high-income countries finds rates of non-compliance that are typically lower. In **Italy**, on average around 10% of workers are paid an average of 20% less than the sectoral minimum (Garnero, 2018). Figures from **Ireland** reveal that workers who are paid below the minimum wage accounted for between 1.2% and 1.4% of total employment in 2016–2018 and that 5.6% of those workers were paid subminimum rates for reasons other than those permitted under legislation (McGuinness et al, 2020). In **Germany**, 2.7% of workers were paid less than the newly introduced statutory minimum wage in 2015; a recent study on the effects of the minimum wage suggests that compliance (either calculated using survey data or obtained from monitoring and enforcement activities) seems to be a major issue (Bruttel, 2019). The introduction of the minimum wage in Germany induced a sizeable positive effect for the bottom quintile of the region-specific hourly wage distributions but did not improve monthly earnings for low-paid employees (Caliendo et al, 2017). In this respect, the reform has proven more effective at reducing contractual hourly wages than actual wages, suggesting an increase in unpaid overtime.⁴ Outside the EU, an interesting case applies to the **United Kingdom (UK)**. The most recent estimates (from 2021) show that around 1% of jobs in the UK are paid below the relevant minimum wage, and most underpaid workers are concentrated in the largest low-paying occupations, in retail, hospitality, and cleaning and maintenance. Also in the UK, a case study on small firms reveals that several firms, both new and long established, do not comply with the statutory minimum wage, and that the boundary between compliance and non-compliance is fluid, with some firms complying in respect of some workers and not others (Ram et al, 2017).

3 The ILO report has also shown that non-compliance is closely linked to the much broader issue of informality, which however cannot be measured from the data used in this report.

4 Others also show increases of monthly wages as well (Mindestlohn Kommission, 2022).

Cross-country evidence is still rare. Garnero et al (2015) focus on 17 EU countries in 2007–2009 and uncover significant heterogeneity in non-compliance rates across countries (from 13% in Italy to less than 1% in Bulgaria), with an average of around 3.5%. Goraus-Tańska and Lewandowski (2019), using EU-SILC for 10 central and eastern European countries with statutory national minimum wages, show that over 2003–2012 the proportion of underpaid workers was similar to that estimated for the US or China, and was highest in Lithuania (6.9%), Latvia (5.6%) and Hungary (4.7%) but much lower in Bulgaria (1.0%) and Czechia (1.3%). The results also show that non-compliance is not limited to a violation of current minimum wages but reflects systematic underpayment (the majority of workers were also paid below the minimum wage the year before), and that violations are considerable (the average monetary shortfall ranges from 13.7% of the specific minimum wage in Estonia to 41.7% in Slovenia).

What influences non-compliance rates

Existing literature shows that compliance depends on the level at which minimum wages are set relative to average wages, and on institutional factors (Rani et al, 2013; Garnero et al, 2015; Bhorat et al, 2015; Goraus-Tańska and Lewandowski, 2019). Rates of non-compliance may vary widely between countries and depend on many factors, such as the design of minimum wage policies, the structure of the system (including the number of rates in place), the level of the rate(s) and the effectiveness of consultation with workers and employee organisations (ILO, 2021).

Systems with negotiated sectoral-level minimum wages and complex legal provisions are associated with a higher

level of the minimum wage (as shown by Kaitz indices), which could lead to a larger share of underpaid workers. This is the case in Italy according to some research. A recent study by Garnero and Lucifora (2022) uncovers a trade-off between higher (lower) compliance with minimum wages and lower (higher) employment levels, even though it is small and present only when the rate of non-compliance is low.

Recent literature addresses concerns about the increase in unregulated and unpaid overtime. The Organisation for Economic Co-operation and Development (OECD) reports a non-negligible incidence of unpaid overtime: around 5% of full-time workers in OECD countries in 2019, ranging from 0.02% in Latvia to 25.4% in the Netherlands (OECD, 2021). Part-time employment saw considerable growth across the EU after the Great Recession, possibly increasing the likelihood of fake part-timers, working shorter hours mainly *de jure* but not so much *de facto*. Firms may hire employees, pay them the minimum wage and ask them to work unpaid extra hours as well, making the firm compliant with the minimum monthly rate but not with the hourly rate (Garnero, 2018). The measurement of working hours is important, since it presents a considerable margin of adjustment through which many violations might take place (Green, 2017).⁵ Green (2017) shows that, in the US, unrecorded and unpaid overtime hours, ‘off-the-clock work’, are mainly driven by low-skilled workers. Off-the-clock work is mostly concentrated in small firms, and within industries that largely employ low-wage workers.

Job and employer characteristics are important drivers of the variation between industries in non-compliance with minimum wages. Female or less educated workers, those in services or agriculture, and those employed in small firms or with temporary contracts are more likely to earn less than the minimum wage (Garnero et al, 2015; Garnero, 2018; Goraus-Tańska and Lewandowski, 2019).⁶

⁵ However, it should be noted that, if workers are paid at or above the minimum wage, even if they are not paid for all the hours they work, there is compliance with the legal floor.

⁶ In Table A.1 in the appendix to Annex 1, the results of the literature review are summarised with details.

2 Measurement of non-compliance with minimum wages: Overview of data sources and methods

In order to measure non-compliance, two main sources of data are necessary. The first has to measure the earnings distribution within each country (more details below and in Annex 1), while the second has to provide information on minimum wage levels that apply in each Member State. Putting the two together makes it possible to identify underpaid workers, by showing how their wages relates to national wage floors (see section ‘Data on national minimum wages’).

Cross-country harmonised data on wages

To measure non-compliance with minimum wages, the EU-SILC and SES databases are used.⁷ These surveys allow researchers to conduct empirical analysis using comparable wage data across EU countries. They are relatively up to date, since EU-SILC is carried out each year, while SES is carried out every four years. Checking the consistency of findings using different data sources is important in studies on compliance with minimum wage regulations (see Ritchie et al, 2017). Each dataset has advantages and drawbacks, which are summarised in Table 1 (see also the appendix to Annex 1 for a more detailed description).

Data on national minimum wages

The analysis of compliance with pay regulations also requires the gathering of information on the level of

minimum wages. Information provided by Eurofound and Eurostat on the level of minimum wages across EU Member States has been used. For statutory minimum wages, statistics published twice a year by Eurostat, referring to monthly national minimum wages applied at the beginning of the year, are used.⁸ The national minimum wage is fixed at an hourly, weekly or monthly rate, and it is enforced by law, often after consultation with social partners, or directly by a national intersectoral agreement. Minimum wages are generally presented as monthly wage rates for gross earnings, that is, before the deduction of income tax and social security contributions payable by the employee; these deductions vary from country to country. For those countries where the national minimum wage is not fixed at a monthly rate (for example, where minimum wages are specified on an hourly or weekly basis), the level of the minimum wage is converted into a monthly rate according to conversion factors supplied by the countries.⁹

Table 2 shows the minimum wage levels in Member States. They usually apply to all employees, or at least to a large majority of employees, in the country. However, several Member States define different rates of minimum wages for specific groups; these are defined as subminima, and their existence or otherwise is indicated in columns 4 and 5 in the table. In order to provide harmonised comparisons across countries with different minimum wage structures, the main estimates of non-compliance rates will consider only the national wage levels as defined in columns 2 and 3.

7 Another dataset that could in principle be considered to quantify non-compliance is the European Working Conditions Survey; however, these data have not been used for two reasons: first, the sample size is small and, second, the information on wages is self-reported by the worker as net. We do not consider the European Union Labour Force Survey, because information on wages is not available in the harmonised EU-level version of the survey. More details on data can be found in Annex 1.

8 We use statutory minimum wages in force during the first half of the reference years, except for SES, for which we employ second-half levels, since its wage information is related to October.

9 Conversion factors are as follows. France: (hourly rate × 35 hours × 52 weeks) / 12 months. The national minimum wage was €9.61/hour in 2014 and €9.88/hour in 2018. Germany: (hourly rate × 40 hours × 52 weeks) / 12 months. The national minimum wage was €8.50/hour in 2015 and €8.84/hour in 2018. Ireland: (hourly rate × 39 hours × 52 weeks) / 12 months. The national minimum wage was €8.65/hour in 2014 and €9.55/hour in 2018. Malta: (weekly rate × 52 weeks) / 12 months. The national minimum wage was €166.26/week in 2014 and €172.51/week in 2018. As can be seen, in this conversion Eurostat takes into account cross-country differences in official full-time working schedules.

Table 1: Characteristics of the datasets used to estimate non-compliance among the EU27

Characteristic	SES	EU-SILC
Frequency	Every 4 years	Annual
Sample	Repeated cross-section of firms (employer–employee type) generally with > 10 employees in the areas of economic activity defined by sections B to S (excluding O) of NACE (Nomenclature of Economic Activities) Rev. 2*	Repeated cross-section and longitudinal survey on sample of households, representative of the population of each country
Information on wages	Reported by the employer	Self-reported. Yearly gross labour earnings not available for all countries. Information on earnings net or gross of taxes depending on the country
Information on working hours	Hours paid in the month to which wages refer	The reported working time pattern refers to the time of the survey, while reported labour income can refer either to the previous year or to the current period
Main pros	<ul style="list-style-type: none"> ○ Matched employer–employee data ○ Reliable and harmonised data on earnings ○ Large sample size 	<ul style="list-style-type: none"> ○ All sectors and all working modalities identified ○ Precise information on earnings from all sources of income ○ Rich information on workers’ backgrounds ○ High-frequency data
Main cons	<ul style="list-style-type: none"> ○ Low-frequency data ○ Unavailability of data on (i) firms with ≤ 10 employees, (ii) informal sector, (iii) agriculture and public administration, (iv) possible reporting errors made by the respondent 	<ul style="list-style-type: none"> ○ Limited information on employers’ characteristics ○ Potential measurement error and non-response issues for earnings ○ Difficulty in constructing a wage estimate based on the available information on yearly labour earnings ○ Earnings net or gross of taxes depending on the country ○ Identification of hourly wages for the given (last) calendar year based on the assumption that hourly wages are equally distributed over time

* The inclusion of NACE section O and the information on enterprises with fewer than 10 employees remains optional.

Source: SES and EU-SILC data

Table 2: Minimum wages in Member States

Country code (1)	Minimum wage rates (€)		Subminima		Type (6)
	2014 (2)	2018 (3)	2014 (4)	2018 (5)	
BE	1,502	1,563	Yes	No	S
BG	174	261	No	No	S
CZ	310	478	No	No	S
DE	n.a.	1,498	No	No	S
EE	355	500	No	No	S
ES	753	859	No	No	S
FR	1,445	1,498	Yes	Yes	S
EL	684	684	Yes	Yes	S
HR	396	462	No	No	S
HU	342	445	No	No	S
IE	1,462	1,614	Yes	Yes	S
LT	290	400	No	No	S
LU	1,921	1,999	Yes	Yes	S
LV	320	430	No	No	S
MT	718	748	Yes	Yes	S
NL	1,486	1,578	Yes	Yes	S
PL	404	503	No	No	S
PT	566	677	No	No	S
RO	190	408	Yes	No	S
SI	789	843	No	No	S
SK	352	480	No	No	S
AT	1,496	1,586	n.a.	n.a.	C
CY	854	840	n.a.	n.a.	C
DK	2,363	2,427	n.a.	n.a.	C
FI	1,440	1,469	n.a.	n.a.	C
IT	Sector-specific ^a	Sector-specific	n.a.	n.a.	C
SE	1,808	1,894	n.a.	n.a.	C

Notes: For those countries where the national minimum wage is not fixed at a monthly rate (for example, where minimum wages are specified on an hourly or weekly basis), the level of the minimum wage is converted into a monthly rate according to conversion factors supplied by the countries.

^a See Table 3 in Annex 1 for values by sector in the case of Italy. In 2018, these values ranged between €1,084 in manufacturing and €1,849 in real estate activities.

S, statutory minimum wage(s); C, wages implemented through collective agreements; n.a., not applicable. In countries without statutory minimum wages (shown at the bottom of the table), minimum wage levels are a statistical artefact and are not comparable with minimum wage rates in other countries.

Sources: Eurostat database on minimum wages for statutory minimum wages; Eurofound (2021) – Table 1 (p. 13) for countries without statutory minimum wages, identified as the average among the three lowest collectively agreed minimum wages identified by the Network of Eurofound Correspondents

For countries without statutory minimum wages – Austria, Cyprus, Denmark, Finland, Italy and Sweden – wages are implemented through collective agreements. In most countries, however, no electronic register of these agreements exists, and no precise numbers on coverage are available. Indeed, gathering these data represents a major challenge. For comparative purposes, estimates provided by Eurofound (2021) are used. These are

obtained by calculating an average among the three lowest collectively agreed minimum wages identified by the Network of Eurofound Correspondents for 2018. These measures (lower part of Table 2) are a statistical construction, since no single minimum wage levels exist in these countries. Nevertheless, they allow analysis with caveats for Austria, Cyprus, Denmark, Finland and Sweden.

To extend the analysis backwards to 2014, given that collective contracts tend to follow inflation trends, OECD inflation rate statistics have been used to express them as constant in real terms across periods.

In the case of **Italy**, more precise information could be obtained. The approach used builds on Garnero et al (2020), and consists in using sectoral collectively agreed minimum wages identified for each sector by the Italian National Institute of Statistics; see Table 3 in Annex 1 for the levels by sector. The institute monitors collective contracts on a regular basis, and in 2015 it created a dataset on the estimated industry *minima minimorum* (the minimum pay levels among those defined by each collective contract). For the subsequent years, imputation of the level of these minimum wages using the inflation levels forecast by the Italian government has been implemented, given that collective contracts tend to follow these rates of growth closely.¹⁰

Methodological approach to the definition of non-compliance

This section provides an overview of the sample selection process, identification of variables of interest and methodology used for the estimation of non-compliance.

The most recent SES waves are used: 2014 and 2018. These two waves interviewed workers randomly selected from a statistical sample of 25 countries in total: all Member States of the European Union (EU27) except Austria and Ireland (Slovakia and Slovenia only in 2018).

The 2014 and 2018 waves of EU-SILC have been considered too, but wage variables typically refer to the previous years, 2013 and 2017. Thus, in these cases, minimum wages applied in 2013 and 2017 when using earnings from the previous year to define actual wage levels have been considered. In the case of EU-SILC, coverage is of 25 countries; no data are available in the cases of Romania and Slovenia.

Results are tested comparing the magnitude of non-compliance based on different selections of the sample, and of earnings measures.

In each country and in each of the available waves of the EU-SILC and SES databases, several comparable measures of earnings have been used. Given that minimum wage levels typically apply to gross wages, gross earnings are typically used as a measure of labour income. For countries in the EU-SILC data where only net wage data are available, minimum wages have been discounted using an appropriate tax rate. In particular, information gathered by the OECD Taxing Wages reports has been used, using the estimated tax rates for single individuals earning 67% of the average wage. This rate is less influenced by country-specific cash benefits and exemptions, which can be quite heterogeneous depending on household size.

In general, gross monthly wages are considered as the variable to measure earnings, so monthly minimum wage rates have been used to compute non-compliance. As a robustness test of the main results, gross hourly wages as an alternative definition of earnings are also used, and non-compliance levels estimated through hourly and monthly minimum wages have been compared. When computing non-compliance with hourly wage levels, the minimum wage has been translated into an hourly gross equivalent level, dividing the monthly minimum by the standard duration of full-time labour contracts implied by a 40-hour working week. Since most countries have a working week that is equal to or less than 40 hours, this approach allows us to derive a conservative estimate of non-compliance when using hourly wages. The section “Identification of relevant variables and of the sample of interest” of Annex 1 provides a detailed account of all the definitions of employees’ monthly earnings adopted for computing non-compliance.

All the analyses are carried out applying sampling weights in order to report only estimates that are representative of the actual population of interest. The preferred sample of analysis consists in employees aged 20–65 and excludes workers with apprenticeship contracts. This choice is rationalised by the fact that exemptions from minimum wages apply in several countries for young workers and apprentices, while these exemptions are often difficult to adjust for due to limitations in the available information (for example, age is reported only in 10 years intervals in SES). Thus, the sample restriction makes it possible to provide conservative estimates of non-compliance that are better harmonised for potential differences in legislation between countries. In EU-SILC, the baseline sample includes only full-time salaried employees and part-time workers reporting the amount of time spent at work, so that all earnings could be expressed at full-time equivalent levels. Consistency in the results was tested using alternative approaches on the full sample as well.¹¹

To check the consistency of the results, Annex 1 also reports results obtained using the broader sample of workers aged 14–65 and including apprentices. Moreover, it compares the results from the full sample with a more precise definition of the minimum wage that takes into consideration the presence of subminima whenever possible.

In order to quantify non-compliance, the main indicator used is the share of workers paid below the minimum wage, out of the total number of employees. However, an important correction is applied to this indicator to avoid overestimation of the amount of non-compliance. In particular, workers are also considered compliant with the minimum wage if there is only a small positive difference between the pay floor and the actual wage, namely for differences of less than 5% of the minimum wage (thus, cases of non-compliance were identified only if earnings were below 95% of the minimum wage). This

¹⁰ More details on the procedure and an explanation of the values used in the estimations can be found in Annex 1.

¹¹ Since in EU-SILC some job-related characteristics refer to the current year, while labour income is typically measured with reference to the previous year with respect to the survey date, the sample in the main estimates using EU-SILC has been restricted to workers who did not change job during the previous year. Annex 1 provides more details on this procedure and on alternative approaches.

methodology is called a doughnut correction, which is often implemented in empirical studies of non-compliance (Garnero, 2018). A broader picture of the relative size of low-paid employment is also provided. To this purpose, three categories of workers are defined: those with earnings below 95%, between 95% and 105%, and between 105% and 150% of the relevant minimum wage.

The Kaitz index (the ratio of the minimum wage to the average or median wage in the country) is contrasted with the measures of non-compliance defined above. In particular, the relationship between the percentage of workers paid below the minimum in each country and the Kaitz index is presented. This is to explore the relationship between non-compliance and the level of the minimum wage with respect to the earnings distribution.

Descriptive statistics for workers who earn less than 95% of the national minimum wage, comparing them with

the rest of the population, are also provided, focusing on the most recent year (2018), and pooling the data across countries to identify European-level characteristics of workers paid below the minimum wage. To check whether hours worked are a margin of adjustment for firms that are not willing to comply with minimum wage regulations, hours worked below and above the minimum wage in each country are reported, and the consistency of the estimates employing hourly wages instead of monthly earnings is also investigated.

Based on the results on the calculation of non-compliance, scoreboard tables are built, which help to identify the combinations of occupations and sectors most at risk of underpayment in each country. The scoreboard table highlights, by the use of different colours, which combinations of occupations and sectors have the highest risk of non-compliance in the country.

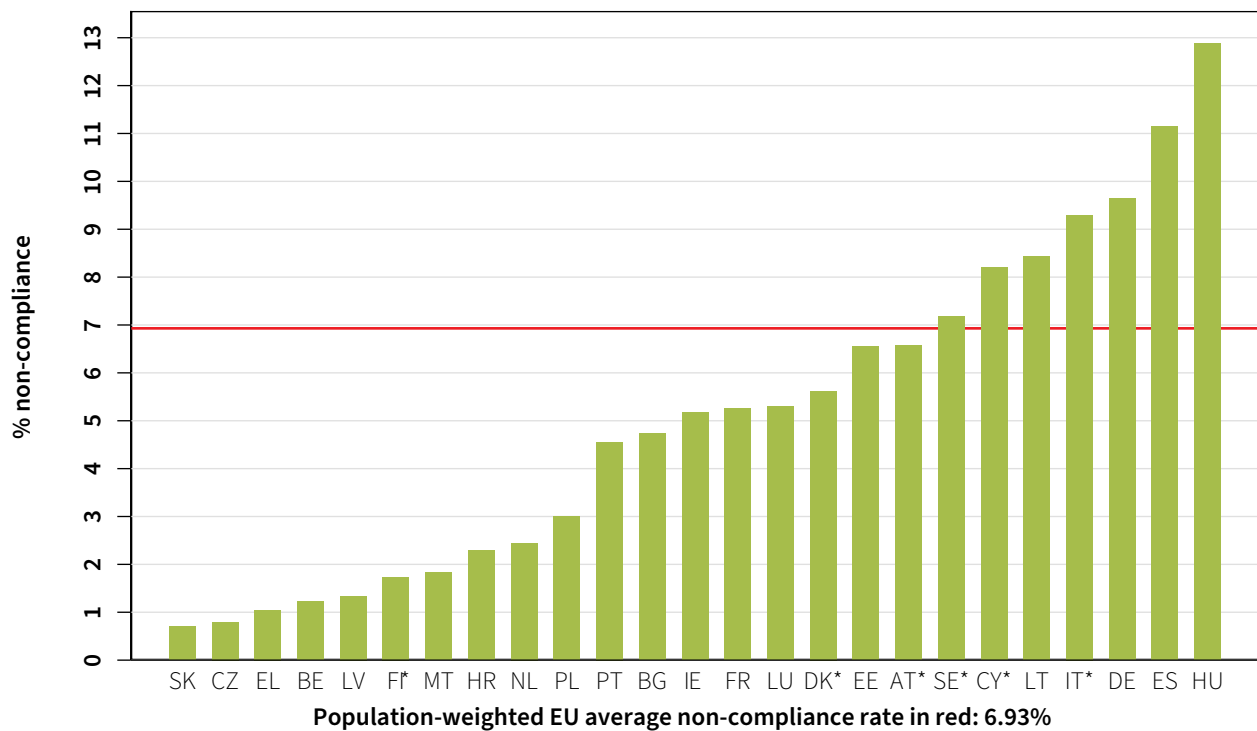
3 Results of the quantification of non-compliance rates

Estimates of non-compliance

In this section, the main estimates of non-compliance obtained from the 2018 waves of EU-SILC and SES are shown.¹² Figure 1 provides the estimates of non-compliance across the Member States derived from EU-SILC; Figure 2 reports the corresponding estimates derived from SES. As can be noted, non-compliance is generally

lower in the SES database than in the EU-SILC database. In the former, the EU-level average weighted by population size is only 1.43%, and it ranges between 5.94% in Cyprus and 0.01% in Belgium. In EU-SILC, the EU-level average is 6.93%, and estimates range from 0.7% in Slovakia to 12.9% in Hungary. Overall, results are in line with previous estimates of non-compliance in European countries, which are concisely reported in Table A.1 of Annex 1.¹³

Figure 1: Non-compliance rates estimated using EU-SILC 2018 (%)



Notes: The percentage of workers earning below 95% of the minimum wage is reported. The sample includes workers aged 20–65. It excludes workers with less than one year of tenure and those changing between part-time and full-time contracts in the previous year. All statistics, including the EU-level average, are computed using sampling weights. The estimated EU-level average non-compliance rate is 6.93%.

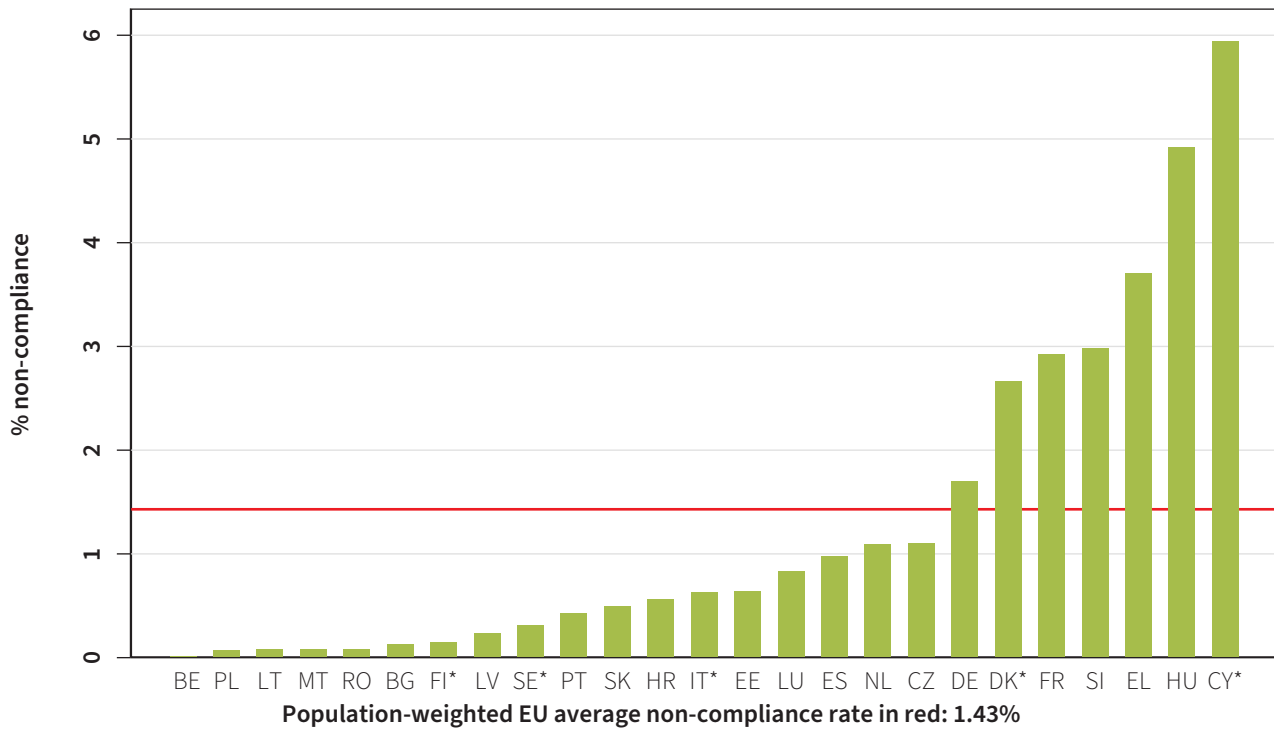
* Minimum wage estimated from sectoral minimum wages set through collective bargaining.

Source: EU-SILC 2018 wave

¹² The estimates reported in this section represent a summary of the extensive set of estimates on both SES and EU-SILC that are available in the corresponding sections of Annex 1. In particular, in this report we show mainly results from EU-SILC and use SES for comparison in relevant cases. Results on SES not shown here are broadly in line with EU-SILC, and we invite the readers to look into the corresponding sections of Annex 1 to visualise results and for more details.

¹³ Estimates of non-compliance should be taken with care when drawing conclusions, given discrepancies between different datasets and estimates.

Figure 2: Non-compliance rates estimated using SES 2018 (%)



Notes: The percentage of workers earning below 95% of the minimum wage is reported. The sample includes workers aged 20–65 and excludes apprentices. All statistics, including the EU-level average, are computed using sampling weights. The estimated EU-level average non-compliance rate is 1.43%.

* Minimum wage estimated from sectoral minimum wages set through collective bargaining.

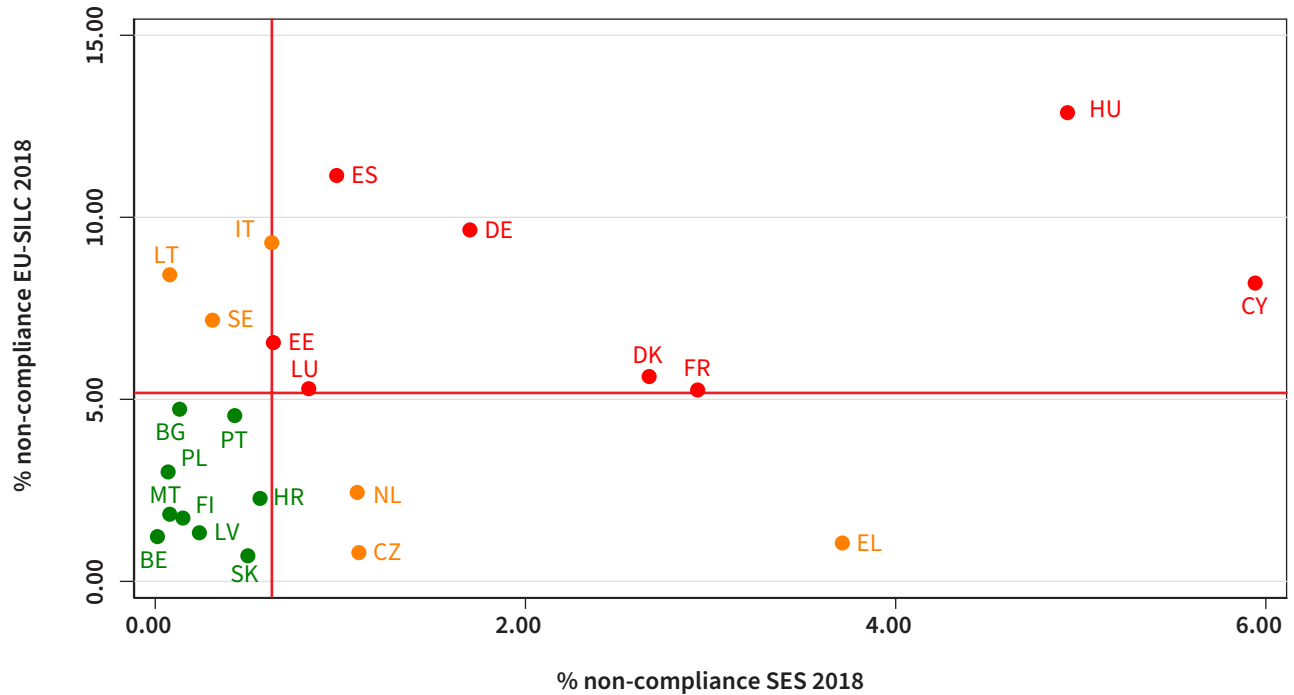
Source: SES 2018 wave

There are several reasons that can explain why non-compliance tends to be higher when estimated using EU-SILC than using SES. First, SES is based on a sampling design that includes only private sector firms with more than 10 employees, while non-compliance is generally larger in smaller firms. Second, SES earnings information is derived from payroll data, while it is self-reported in EU-SILC. For this reason, in SES it could be less likely that employers declare an earnings level that is below the statutory one. There are, however, some countries where non-compliance is higher when estimated using SES, namely Czechia, Denmark, Greece, France and the Netherlands. These cases could in part be linked to the fact that, to properly impute a monthly wage level, workers with less than one year of tenure are excluded

from the EU-SILC sample in our main estimates. Thus, a significant portion of underpaid employees could be underrepresented in this sample too.

Some similarities in estimates of non-compliance across databases can be detected. To better identify them, Member States have been classified based on how strong their non-compliance level in each database is. Figure 3 provides a scatterplot where, on the vertical axis, the non-compliance level estimated in EU-SILC is reported, while on the horizontal axis the level estimated through SES is reported. The median level of non-compliance at EU level is represented by the horizontal red line in EU-SILC, and by the vertical red line in SES.

Figure 3: Relationship between non-compliance rates using EU-SILC and SES



Correlation in non-compliance rates between EU-SILC and SES estimates: 0.39

Notes: The percentage of workers earning below 95% of the minimum wage is reported. The sample includes workers aged 20–65 and excludes apprentices (in SES). Countries in green have a non-compliance level below the EU27 median level in both SES and EU-SILC. Those in orange have a non-compliance level above the median in only one of the two databases. Those in red have a non-compliance level above the median according to both datasets.

Sources: SES and EU-SILC 2018 waves

Each dot in the graph represents a country. Countries where non-compliance is below the median level of both EU-SILC and SES are in green. Countries where non-compliance is above the EU-level median in only one of the two databases are in orange. Finally, countries where non-compliance is above the EU median according to both databases are in red. According to this classification, there are nine Member States in green (Belgium, Bulgaria, Croatia, Finland, Latvia, Malta, Poland, Portugal, Slovakia), six Member States in orange (Czechia, Greece, Italy, Lithuania, Netherlands, Sweden) and eight Member States in red (Cyprus, Denmark, Estonia, France, Germany, Hungary, Luxembourg, Spain). These estimates show that non-compliance tends to be high in several of the larger countries such as France, Germany and Spain. It is also high in some small and medium-sized eastern and southern European countries such as Cyprus (where non-compliance is estimated with respect to collectively bargained minimum wages), Estonia and Hungary. Finally, it is also consistently higher than the median in Luxembourg, where the minimum wage is the highest in the EU.

From Figure 3, it emerges that the correlation between estimates of non-compliance obtained in the EU-SILC database and in the SES database is positive, with a correlation coefficient around 0.4. The majority of

countries are labelled in either green or red, meaning that most of them can be conclusively classified as high- or low-non-compliance countries according to both databases. Nevertheless, there are also significant discrepancies in the results across datasets, which underlines the importance of considering carefully which source of information is used in measuring non-compliance, as estimates tend to be data-dependent.

Exploiting the longitudinal dimension of the data might be useful to explore the temporal evolution of non-compliance with wage regulations. Results for 2014–2018 (for details see Chapter 3 of Annex 1) show that non-compliance levels have been mostly stable over time, but with some exceptions. In particular, Hungary, Spain, Italy, Estonia, Luxembourg, Portugal, Lithuania and Austria have been characterised by a relatively noticeable growth in non-compliance levels throughout the period considered. In contrast, Sweden, Cyprus and, to a lesser extent, Croatia and Slovakia have been characterised by a decreasing trend. Overall, the population-weighted EU average increased from 5% in 2014 to 6.93% in 2018 according to EU-SILC estimates. When considering a fully balanced sample of countries – that is, considering only Member States in which non-compliance could be estimated in both 2014 and 2018 – the population-weighted EU average increased at a slightly slower pace, from 5% to 6.1%.

Quantification of workers around the minimum wage

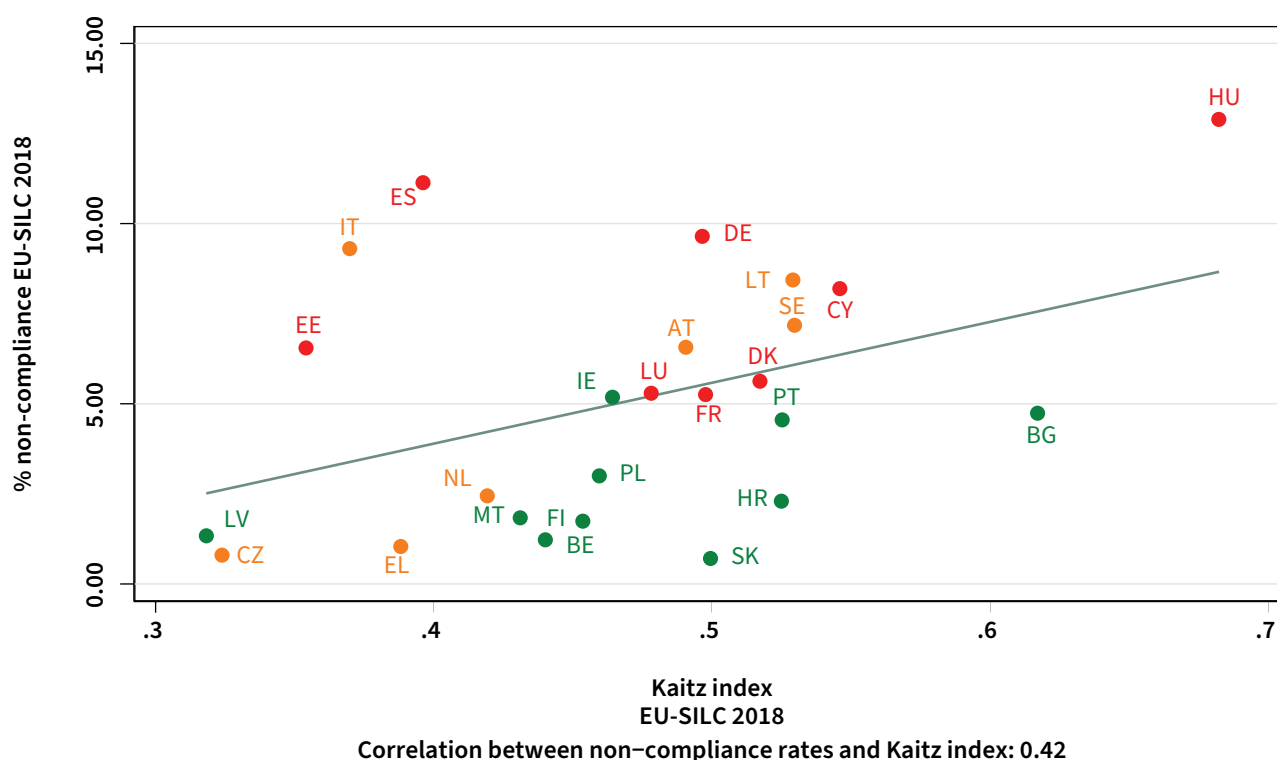
When evaluating the level of non-compliance of a country, it is important to consider the level of the minimum wage with respect to the wage distribution of the country. It can be more difficult to comply with the legislation if the minimum wage is set at a relatively high level. Thus, a high non-compliance level could be the symptom of a minimum wage set at a level that is too high with respect to the wage distribution. One useful measure of whether the minimum wage is set high or low with respect to prevailing wage levels in a given country is the Kaitz index, which is the ratio of the minimum wage to the median wage. Directive (EU) 2022/2041 suggests several indicators as measures of an adequate minimum wage level, among them the well-known value of 60% of the national gross median wage, corresponding to a Kaitz index of 0.6. The Kaitz index is also considered a good predictor of non-compliance, given that complying with the minimum wage legislation could be more difficult the higher the statutory pay level is set relative to prevailing wage levels. In this section we

present results using EU-SILC; results using SES point to the same conclusion.¹⁴

Figure 4 shows the relationship between the Kaitz index and non-compliance rates estimated using the 2018 wave of EU-SILC. In the graph, the same colours as in Figure 3 are used to show the consistency of countries' non-compliance levels across estimates.

Considering the distribution of countries along the horizontal axis of Figure 4, most of them have a Kaitz index that is estimated at a level between 0.4 and 0.6. It can be noted that there is a generally positive correlation between non-compliance and the Kaitz index. In particular, the correlation coefficient between non-compliance and the Kaitz index is 0.42. Moreover, countries in red, which are those with generally higher non-compliance levels considering both SES and EU-SILC estimates, tend to lie above the linear prediction of non-compliance provided by the Kaitz index. This suggests that these countries have rates of non-compliance that are higher than the EU average when taking into account the level at which the minimum wage is set, even if some caution is necessary in interpreting this result given the uncertainty and potential measurement error in these estimates.

Figure 4: Relationship between non-compliance rates and the Kaitz index in EU-SILC



Notes: The percentage of workers earning below 95% of the minimum wage is reported on the vertical axis, and the Kaitz index (the ratio between the minimum wage and the median wage) is reported on the horizontal axis. For countries characterised by multiple minimum wages set by collective bargaining, the lowest pay floor is selected in defining the Kaitz index. The sample includes workers aged 20–65. Countries in green have a non-compliance level below the EU27 median level in both SES and EU-SILC. Those in orange have a non-compliance level above the median only in one of the two databases. Those in red have a non-compliance level above the median according to both datasets.

Source: EU-SILC 2018 wave

¹⁴ These are not shown here but are available in Annex 1 (Chapter 3).

It is also important to consider how many workers are paid a wage that is fairly close to the minimum level. This exercise allows us to determine the share of the workforce earning around or just above the minimum wage. Table 3 reports the percentages of workers earning less than 95%, between 95% and 105% and between 105% and 150%

of the minimum wage. The first group is represented by workers whose pay does not comply with the minimum wage legislation. The second group is represented by workers who earn just the minimum wage. The last group represents employees with earnings above, but relatively close to, the minimum wage.

Table 3: Non-compliance rates and proportions of employees close to the minimum wage, EU-SILC 2018, main estimates (%)

Country	Non-compliance	Minimum wage workers	Workers between minimum wage and 1.5 × minimum wage
AT	6.57	2.15	16.37
BE	1.23	0.51	8.77
BG	4.73	3.41	34.27
CY	8.20	4.08	23.54
CZ	0.80	0.59	4.18
DE	9.65	2.82	16.21
DK	5.62	1.25	12.97
EE	6.55	2.08	13.54
EL	1.05	0.26	6.11
ES	11.14	2.34	13.53
FI	1.73	0.92	8.01
FR	5.25	1.30	13.72
HR	2.29	3.49	27.30
HU	12.88	5.78	33.00
IE	5.18	3.35	18.13
IT	9.30	1.86	9.78
LT	8.43	4.69	22.40
LU	5.29	4.67	21.38
LV	1.34	0.43	6.07
MT	1.84	1.84	14.29
NL	2.45	0.92	9.97
PL	3.01	0.81	16.19
PT	4.56	2.11	23.23
RO	n.a.	n.a.	n.a.
SE	7.18	1.62	15.52
SI	n.a.	n.a.	n.a.
SK	0.70	0.60	18.36

Notes: The percentages of employees earning below 95%, between 95% and 105% and between 105% and 150% of the minimum wage are reported. The sample includes workers aged 20–65 and excludes workers with less than one year of tenure. n.a., not applicable.

Source: EU-SILC 2018 wave

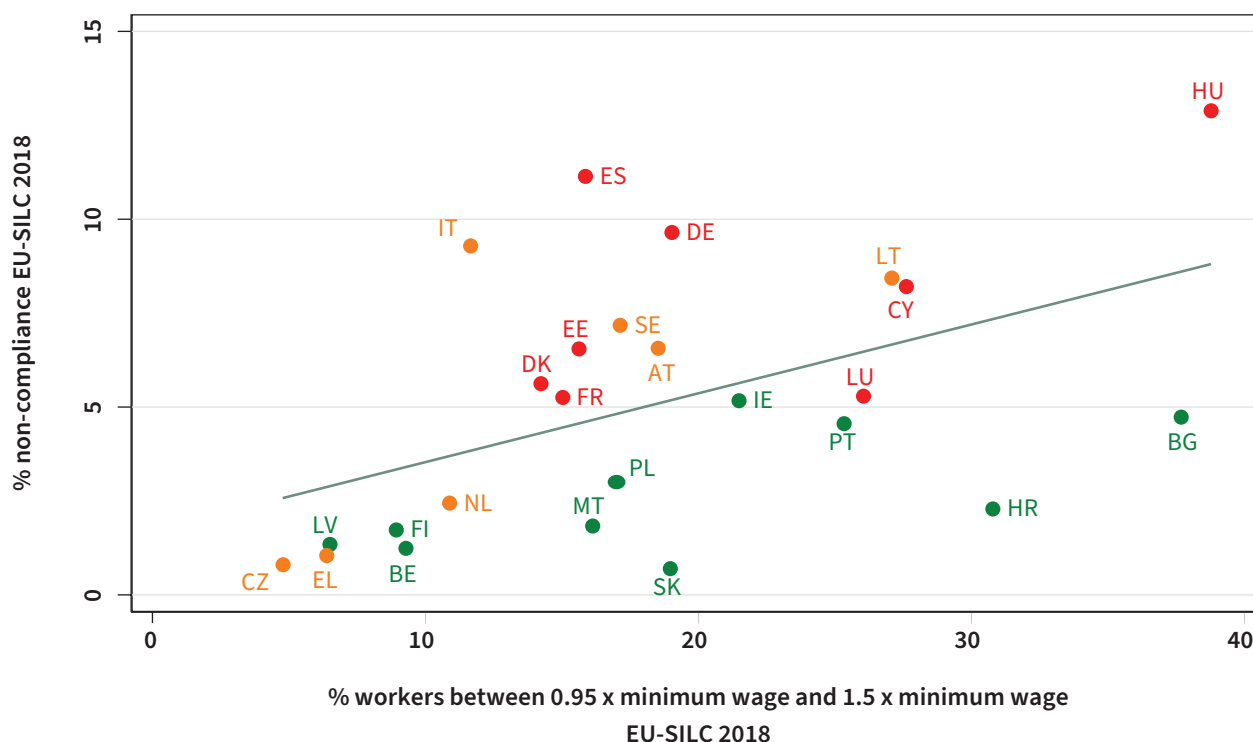
In Table 3, cells are highlighted in greener colours if the size of each group below or above the minimum wage is relatively small compared with other countries, and in redder colours if the size of each of the three groups of workers is relatively large. As can be seen, the percentage of workers earning between 95% and 105% of the minimum wage is generally quite low. Minimum wage workers range from 5.78% of employees in Hungary to levels close to 0% in several countries. The proportion of workers paid between 105% and 150% of the minimum wage is generally larger, as it ranges from 34.3% in Bulgaria to only 4.2% in Czechia.

It is interesting to notice that countries where non-compliance is relatively large, which are highlighted by red colours in the second column of Table 3, generally have a higher percentage of workers with earnings at or just above the minimum wage level. The colours in the third and fourth columns of Table 3 are mostly similar to the colours in the second column. Thus, having a large share of the workforce with earnings that are relatively close to the minimum wage is a good predictor of the incidence of non-compliance. This is because this share is generally larger when there are many low-paid workers, or when the

minimum wage is set at a relatively high level with respect to the prevailing wages of a given country (thus when the bite of the minimum wage affects many workers), so that complying with this legislation could be more difficult.

Figure 5 shows the relationship between non-compliance and the share of workers earning between 95% and 150% of the minimum wage in EU-SILC.¹⁵ The share of the workforce earning between 95% and 150% of the minimum wage ranges from around 4.8% in Czechia to 38.8% in Hungary in EU-SILC. As can be seen, there is generally a positive relationship between non-compliance and the share of workers with earnings close to the minimum wage. The correlation coefficient between these rates is 0.48. Countries highlighted in red, which have generally higher non-compliance levels in both SES and EU-SILC, tend to lie above the linear fit of non-compliance provided by the share of employees earning between 95% and 150% of the minimum wage. This implies that in these countries non-compliance is usually higher than the cross-country average observed given a similar share of the workforce with earnings close to the minimum wage.

Figure 5: Relationship between non-compliance rates and share of workers paid between 0.95 and 1.5 of the minimum wage in EU-SILC



Notes: The percentage of workers earning below 95% of the minimum wage is reported on the vertical axis, and the percentage of workers earning between 95% and 150% of the minimum wage is reported on the horizontal axis. The sample includes workers aged 20–65. Countries in green have a non-compliance level below the EU27 median level in both SES and EU-SILC. Those in orange have a non-compliance level above the median only in one of the two databases. Those in red have a non-compliance level above the median according to both datasets. The correlation between non-compliance and the share of workers earning between 0.95 and 1.5 times the minimum wage is 0.48.

Source: EU-SILC 2018 wave

¹⁵ Figure A.2 in Annex 1 provides the corresponding figure constructed using the 2018 wave of SES, which shows very similar results.

Who are the underpaid workers? Individual characteristics and work schedules

This section provides a characterisation of workers who earn a wage level that is below the minimum.¹⁶ Table 4 shows descriptive statistics derived from EU-SILC. For each variable considered, the second column reports the average computed on the sample of workers below the minimum, and the third column reports the average for the rest of the sample. The fourth column reports a test on the significance of the difference between the two means.

Starting from the upper part of the table, it can be seen that workers below the minimum wage tend to be younger, and they are more likely to be women, to be employed on a fixed-term contract and to work part time.¹⁷ Moreover, they have generally lower levels of education, and they are more likely to be employed by smaller firms. This result may help explain why non-compliance is

generally larger when estimated on the basis of EU-SILC, which also includes small firms. The result regarding hours worked suggests that workers earning below the minimum wage are more likely to be less intensively employed. Specifically, they work fewer hours per week, which is mainly a consequence of the fact that they are also more likely to work part time.¹⁸ However, even when hours worked per week by part-time status are considered separately, the working schedules of employees paid below the minimum wage tend to be shorter among both part-time and full-time workers, even if to a smaller extent, especially among full-time workers.

In analysing non-compliance, it is important to note that working hours could be a relevant margin of adjustment employed by firms. Employers could be paying the right monthly wage rate in compliance with the legislation, while employing workers for more hours. On the other hand, low-paid workers could be concentrated among employees with discontinuous work records, often characterised by shorter working schedules.

Table 4: Descriptive statistics on workers paid less than the minimum wage and on the rest of the population, EU-SILC

Characteristic	Workers below minimum wage	Workers above minimum wage	Significance of difference
Age	37.7	44.1	** (-)
% age 20–29	27.5	11.0	** (+)
% age 30–39	19.8	24.3	** (-)
% age 40+	44.7	64.4	** (-)
% women	55.60	47.10	** (+)
% fixed-term contract	42.60	10.10	** (+)
Hours of work/week	34.9	38.1	** (-)
Hours of work if part time	22.8	24.5	** (-)
Hours of work if full time	40.3	40.6	* (-)
% part-time contract	30.80	15.80	** (+)
% firm size 1–10	38.90	19.70	** (+)
% firm size 11–49	31.30	31.50	(-)
% firm size 50+	29.80	48.80	** (-)
% basic education	6.94	3.13	** (+)
% secondary education	59.18	36.45	** (+)
% tertiary education	33.88	60.42	** (-)

Notes: Below minimum wage workers are those earning less than 95% of the minimum wage. All statistics are weighted using sampling weights. The significance of the difference in means across groups is calculated using the P-value of the two-sided t-test. Significance levels: ** 1%; * 5%.

Source: EU-SILC 2018 wave

¹⁶ In this case too, statistics and results from SES are qualitatively similar (see Chapter 4 of Annex 1).

¹⁷ This is in line with results from a recent ILO report providing worldwide evidence on the issue (ILO, 2021).

¹⁸ Working hours are actual and not contractual ones. They are self-reported in the survey.

Table 5: Working hours above and below the minimum wage by country, EU-SILC 2018 wave

Country	Hours worked		Hours worked if full-time workers		Hours worked if part-time workers	
	Below minimum wage	Above minimum wage	Below minimum wage	Above minimum wage	Below minimum wage	Above minimum wage
AT	34.4	37.8	41.4	42.2	22.3	24.0
BE	31.5	36.4	39.4	40.3	23.7	26.2
BG	39.4	40.5	42.5	40.9	24.5	22.0
CY	38.3	39.0	41.0	39.9	22.6	20.7
CZ	36.9	40.6	40.4	41.2	22.5	22.3
DE	31.5	38.0	40.3	42.6	19.9	24.2
DK	31.3	37.3	36.4	38.4	17.0	25.5
EE	37.9	39.7	41.2	40.8	24.8	22.8
EL	33.0	38.9	40.7	40.7	18.8	20.2
ES	37.1	38.3	40.8	40.2	21.7	21.4
FI	31.4	38.0	38.3	39.4	21.4	21.7
FR	36.3	37.5	41.0	39.7	27.3	25.9
HR	40.2	40.3	42.0	40.8	22.9	20.0
HU	38.8	40.0	40.0	40.3	25.6	25.3
IE	31.6	34.9	38.7	39.5	20.7	18.9
IT	36.1	36.9	39.7	39.0	27.1	25.2
LT	38.1	39.2	39.9	40.0	22.5	19.7
LU	36.7	41.0	41.1	44.0	28.6	25.7
LV	38.4	39.3	40.9	40.2	20.1	20.8
MT	30.4	39.4	40.4	40.4	17.3	20.4
NL	26.7	33.0	39.0	39.1	20.6	24.8
PL	39.1	40.4	41.4	41.2	23.9	24.0
PT	39.2	40.5	41.7	41.3	20.2	20.3
RO	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SE	36.1	39.0	40.1	40.9	28.0	28.5
SI	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SK	37.4	40.5	41.1	41.0	19.7	22.6
Total	34.8	38.1	40.3	40.6	22.8	24.5

Notes: Below minimum wage workers are those earning less than 95% of the minimum wage. All statistics are weighted using sampling weights. The sample includes workers aged 20–65.
n.a., not applicable.

Source: EU-SILC 2018 wave

More detailed cross-country information on working hours is provided in Table 5. It shows, for each Member State, the average number of weekly hours worked according to the EU-SILC database, reported separately for workers below and above the minimum wage. Underpaid workers have shorter schedules, as they work on average 35 hours per week (compared with 38 in the rest of the population). This holds true in all countries considered.¹⁹

The evidence of Table 5 suggests that underpaid workers tend to be generally less attached to the labour market, as they work fewer hours per week. This reflects different sorting of low-paid occupations into part-time contracts and also into jobs with typically shorter schedules. It could also reflect a tendency to use informal secondary jobs to

¹⁹ Results from SES are similar, except for Hungary, Poland and Romania, where working schedules are generally longer than the EU average (see the relevant section in Annex 1 for details).

complement regular income, even if no direct evidence can be provided on this mechanism.²⁰

When hours worked are considered separately by part-time status, the EU aggregate picture of workers paid below the minimum wage having shorter schedules is not always confirmed at country level. Full-time workers paid less than the minimum wage work on average longer schedules in 13 out of 25 countries considered. In contrast,

part-time workers paid below the minimum wage work longer schedules in 12 out of 25 countries.

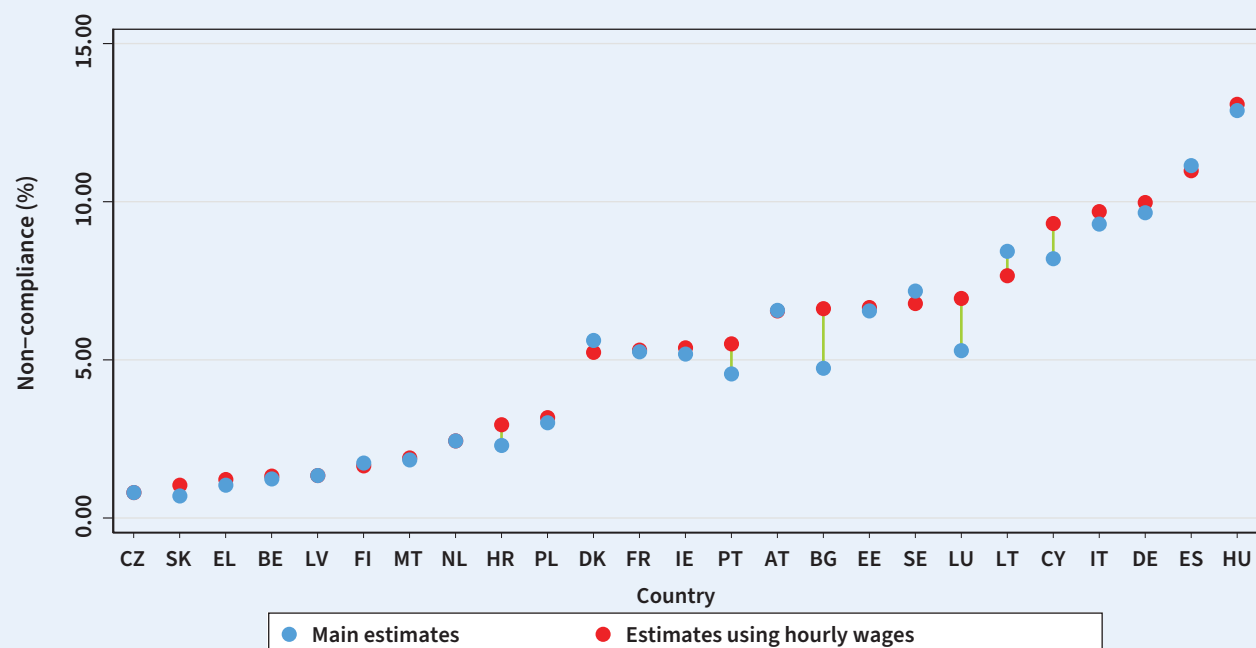
Box 1 shows that non-compliance estimates are generally higher if hourly wages, instead of monthly earnings, are used to estimate it. Apart from differences in measurement error, this could also reflect the fact that some employers that pay low wages may use longer hours than stated in the contract, so that they comply with monthly, but not hourly, wages.

Box 1: Estimating non-compliance using hourly wages

In order to provide a more precise account of the effect that heterogeneities in working hours could have on the estimates of non-compliance, non-compliance has been computed using hourly wages instead of their monthly level. Figure 6 shows the level of non-compliance estimated using hourly wages in EU-SILC and compares these results with our main estimates based on monthly wages.²¹ As can be seen, non-compliance is more likely to be higher when hourly wages are considered, although in several countries estimates are relatively close using either monthly or hourly wages. Non-compliance with hourly minimum wages is particularly high in several countries, namely Bulgaria, Luxembourg, Cyprus, Portugal, Croatia and, to a lower extent, Italy and Germany among others. However, the population-weighted EU average level of non-compliance is only marginally affected, as it grows from 6.9% to 7.1%.

In general, when non-compliance is estimated using self-reported data, misreporting of actual working schedules could increase the measurement error, and this could in part explain such differences in the results. Nevertheless, our results suggest that hours worked are an important factor to consider when estimating non-compliance. In this respect, some employers may use longer hours than stated in the contract, so they comply with monthly, but not hourly, minimum wages. This mechanism would be consistent with the finding of higher minimum wage non-compliance when using hourly wages.

Figure 6: Comparison of non-compliance rates using hourly wages and hourly pay floors with the main approach, EU-SILC 2018



Notes: Below minimum wage workers are those earning less than 95% of the minimum wage. All statistics are weighted using sampling weights. The sample includes workers aged 20–65. Hourly wages are obtained by dividing monthly wages by the reported number of hours worked, scaling up weekly amounts when necessary. Hourly minimum wages are obtained by scaling down the monthly rate, assuming a 40-hour working week.

Source: EU-SILC 2018 wave

²⁰ European Working Conditions Survey data for 2015 were used to look into the quality of jobs done by underpaid workers. The data show that workers earning below minimum wages rarely report that they work (on average) more than 40 hours a week (only 9% versus 29% for those earning above minimum wages), they are predominantly employed in part-time jobs (70% versus 13%) and also their part-time work is predominantly involuntary (the hours they would like to work being higher than their reported weekly working hours). The results are informative but should be taken with caution because of the small sample size. For details please refer to Box 4 of Annex 1.

²¹ When non-compliance is estimated using hourly wages, we have divided the monthly minimum wage by the monthly hours of work implied by a 40-hour weekly schedule. Since most countries have a working week shorter than 40 hours, this is a conservative approach. See section 2.2 of Annex 1 for a detailed discussion of the procedure used.

Incidence of non-compliance by sectors and occupations

In this section, a detailed analysis on the sectoral and occupational composition of workers earning below the minimum wage is shown. Table 6 provides an estimate of non-compliance across sectors and occupations, as derived from EU-SILC. Each cell of the table reports the percentage of employees earning less than 95% of the minimum wage within a sector and occupation group. In the table, green colouring indicates lower non-compliance levels, while red indicates higher levels.

In Table 6, non-compliance is lowest among technicians and skilled workers (3.5%). It is highest among manual workers (9.4%) and clerical workers (8.2%). The group of managers/professionals has a relatively high incidence of non-compliance as well (7.4%). However, this occupational group may include several low-paid professional activities

in sectors with relatively low productivity, which may play a role in explaining the result. This consideration is consistent with the incidence of non-compliance across sectors for this occupational group, as it is highest in the agriculture, construction, and trade, transport and tourism sectors, where the incidence of small businesses and of low-paid professional activities tends to be high.

When considering sectors, non-compliance is relatively high in the agriculture, construction, trade, transport and tourism, and other services sectors. Manufacturing, on the other hand, is a sector where non-compliance is generally low. When considering sectors and occupations jointly, some estimates tend to be quite high. For example, non-compliance in the other services sector among manual workers is around 14%. These results, especially in the case of EU-SILC, should be taken with caution due to the small (within-cell) sample sizes.

Table 6: Scoreboard table on the incidence of non-compliance across sectors and occupations, EU-SILC (%)

Sector	Managers, professionals	Technicians, skilled workers	Clerical workers	Manual workers	Total
Agriculture, construction	11.8	3.4	7.6	12.9	11.4
Manufacturing, mining, commodities	5.8	1.7	5.0	5.5	5.1
Trade, transport, tourism	12.8	4.1	9.1	8.1	9.7
Other services	6.0	3.9	8.1	14.0	7.0
Total	7.4	3.5	8.2	9.4	7.6

Notes: Below minimum wage workers are those earning less than 95% of the minimum wage. All statistics are weighted using sampling weights. Agriculture and constructions are bundled together because of small sample size issues arising for both sectors.

Source: EU-SILC 2018 wave

Box 2: Non-compliance across sectors and occupations using the Structure of Earnings Survey

The SES database contains a larger number of observations and more detailed information on sectors and occupations. For this reason, it is particularly appropriate for a more detailed analysis of non-compliance within narrower occupation and sector cells. Table 7 replicates the same analysis as described in Table 6, this time using SES.

Given the larger sample size, Table 7 provides estimates of non-compliance using a more granular definition of sectors. The results show that non-compliance is generally higher in the tourism sector than in transport or trade. Moreover, it is quite high in residual service activities. With respect to occupations, non-compliance also seems relevant among technicians and skilled workers within these tertiary sectors.

Table 7: Scoreboard table on the incidence of non-compliance across detailed sectors and occupations, SES (%)

Sector	Managers, professionals	Technicians, skilled workers	Clerical workers	Manual workers	Total
Manufacturing, mining, commodities	0.1	0.2	0.5	0.8	0.6
Construction	0.2	0.4	1.0	0.9	0.7
Trade	0.2	0.4	1.2	2.0	1.4
Transport	0.3	0.4	0.7	1.9	1.3
Tourism	0.7	2.6	2.3	4.2	3.8
Communication, finance	0.2	0.5	0.9	3.4	0.6
Real estate, professionals, support services	0.3	0.8	1.9	3.4	2.1
Public services, education, health	0.7	0.5	1.5	3.7	1.5
Other services	0.6	2.5	1.9	5.0	3.1
Total	0.4	0.6	1.2	2.3	1.4

Notes: Below minimum wage workers are those earning less than 95% of the minimum wage. All statistics are weighted using sampling weights.

Source: SES 2018 wave

In order to provide a more detailed illustration of non-compliance at sectoral level by country, Table 8 provides estimates by industry and by Member State. This scoreboard table makes it possible to uncover more nuanced mechanisms behind non-compliance estimates within each country. For example, among countries with high non-compliance levels, in Hungary this problem is concentrated mostly in some services sectors, while in Cyprus and Greece the incidence of non-compliance is more evenly distributed across industries but is particularly high in the tourism sector. Similarly, it emerges that manufacturing is an industry with an overall low level of non-compliance, but in some countries, in particular Cyprus, Slovenia and France, non-compliance tends to be relatively high within this sector.

Table 8: Scoreboard table on the incidence of non-compliance across detailed sectors and Member States, SES (%)

Country	Manufacturing, mining, commodities	Construction	Trade	Transport	Tourism	Communication, finance	Real estate, professionals, support services	Public services, education, health	Other services	Total
BE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BG	0.11	0.02	0.20	0.08	0.31	0.01	0.21	0.09	0.09	0.13
CY	7.03	5.99	10.00	5.38	10.72	0.36	3.41	1.57	13.03	5.94
CZ	0.54	1.94	1.29	0.33	4.39	0.27	3.24	0.34	1.41	1.10
DE	0.64	0.73	2.10	3.27	6.75	0.94	2.80	0.54	4.06	1.70
DK	0.60	0.48	2.98	2.04	5.72	0.31	1.95	3.97	2.40	2.67
EE	0.38	0.61	0.53	0.51	0.94	0.27	2.38	0.18	1.23	0.65
EL	1.74	2.92	2.36	1.65	10.67	0.55	3.18	1.24	6.99	3.71
ES	0.34	0.46	0.92	0.53	1.46	0.80	1.50	0.96	2.36	0.98
FI	0.02	0.25	0.10	0.04	0.17	0.04	0.30	0.17	0.47	0.15
FR	1.78	1.59	2.95	1.34	3.71	0.86	3.71	3.70	4.96	2.92
HR	0.69	0.12	0.65	0.28	1.82	0.09	1.13	0.24	0.34	0.56
HU	0.11	0.46	0.02	0.37	0.37	0.02	0.31	13.69	7.54	4.92
IT	0.19	0.48	0.29	0.16	0.93	0.64	1.21	0.90	1.82	0.63
LT	0.02	0.00	0.18	0.04	0.32	0.00	0.14	0.06	0.17	0.08
LU	0.97	0.55	0.75	1.19	1.81	0.74	1.36	0.24	0.00	0.82
LV	0.11	0.13	0.16	0.04	0.13	0.02	0.13	0.63	0.08	0.24
MT	0.00	0.20	0.00	0.00	0.00	0.00	0.03	0.21	0.00	0.08
NL	0.62	0.66	1.53	0.84	2.10	0.51	1.76	0.57	2.46	1.09
PL	0.06	0.18	0.08	0.23	0.13	0.01	0.08	0.04	0.03	0.07
PT	0.16	0.29	0.32	0.25	1.73	0.02	1.08	0.20	0.28	0.43
RO	0.08	0.27	0.00	0.00	0.05	0.00	0.05	0.00	1.48	0.08
SE	0.06	0.17	0.42	0.37	1.25	0.16	0.89	0.14	1.03	0.31
SI	2.75	2.29	3.34	2.06	4.49	1.75	3.89	2.73	6.62	2.98
SK	0.38	0.33	0.54	0.43	1.06	0.06	0.83	0.42	1.73	0.50
Total	0.56	0.73	1.42	1.33	3.83	0.62	2.10	1.51	3.07	1.43

Notes: Below minimum wage workers are those earning less than 95% of the minimum wage. All statistics are weighted using sampling weights.

Source: SES 2018 wave

4 Concluding remarks, challenges and limitations

Estimates of non-compliance

Despite the two datasets producing rather different results as regards the overall level of non-compliance, some common tendencies emerge clearly from our quantification exercise. The data suggest that non-compliance in the EU ranges between 0.01% in Belgium (using SES) and 11.59% in Hungary (using EU-SILC). On average it is around 6.93% in EU-SILC and 1.3% in SES.

Countries where non-compliance was higher than the median level according to both EU-SILC and SES data are Cyprus, Denmark, Estonia, France, Germany, Hungary, Luxembourg and Spain. Countries with non-compliance levels consistently lower than the median are Belgium, Bulgaria, Croatia, Finland, Latvia, Malta, Poland, Portugal and Slovakia.

We find that the Kaitz index (ratio of the minimum wage to the average or median wage in a country) is positively correlated with non-compliance. Countries with relatively high Kaitz indices and non-compliance levels include Hungary, Cyprus, Luxembourg and Germany. On the other hand, there are some exceptions to this trend, such as Bulgaria, where a high Kaitz index was associated with a relatively low level of non-compliance.

Workers who are paid less than the minimum wage are generally younger, and less educated, and are more likely to be female, on a fixed-term or part-time contract and employed by smaller firms. Moreover, no clear trend in terms of non-compliance emerges over time, considering changes between 2014 and 2018.

Regarding the sectoral composition of non-compliance, the services sectors are generally more affected by this phenomenon than the manufacturing sector. Non-compliance is characterised by shorter working time and it is higher when estimated using hourly wages instead of monthly wages, particularly in the case of EU-SILC. An explanation is that workers who are paid less than the minimum wage could be more concentrated in occupations characterised by shorter schedules or be less attached to the labour market. The fact that non-compliance is higher when estimated with hourly wages could also reflect the fact that some employers may comply with monthly minimum wages but not with hourly levels, although differences in measurement error could also play a role.

The estimates obtained using SES are generally lower because wage data are provided by employers, who are highly unlikely to willingly report wages that do not comply with legal minimums, but still they are not negligible. All in all, the main trends across industries and workforce groups are confirmed with both SES and EU-SILC. However, estimates on the size of non-compliance can be quite different across databases, even when

the same country is considered. This is mainly due to differences in the way in which information on income is measured and reported, compositional effects, and different coverage in terms of industries and type of workers.

To conclude, enforcement policies are central in increasing compliance with minimum wages because non-compliance is the result of unobserved behaviours by firms; thus without monitoring or sanctions it might be very difficult to reduce it, as is extensively shown in Part 2 of the report.

Improving data availability

The findings presented in this report call for reflection on the quality of data that can be used to quantify non-compliance with minimum wages in the EU Member States. The measurement of non-compliance requires the use of precise information on wages. In addition, the measurement of working hours is important for the effective identification of wage violations, since it constitutes a considerable margin of adjustment through which many violations might take place. Currently available harmonised datasets at EU level differ greatly with respect to the availability of information on wages and working hours, as has been widely shown in this report. They also differ in terms of sample and coverage. Another challenge regards information on minimum wage levels across the EU. While this information is currently available in countries with a statutory minimum wage, it is seldom available in countries where pay floors are set through collective bargaining at sector-wide level. Obtaining precise information on pay levels and being able to correctly match it to wage data would help to improve estimates of non-compliance, and this is probably one way to go in the near future.

In order to improve our knowledge on this phenomenon, the recent proposal to include accurate information on actual wage levels in the harmonised European Labour Force Survey is a very positive step forward. Moreover, hours of work are often not accurately recorded, and this might lead to problems of measurement error that could have consequences for the reliability of non-compliance estimates. Cross-validation of data sources from survey and administrative records could be a convincing strategy to overcome these challenges.

To gauge further insights into non-compliance and advancement in its measurement, a direct question could be introduced, for example in the EU Labour Force Survey, that makes it possible to distinguish between workers who are paid below the minimum wage because they are legally exempt and those who are entitled to, but do not receive, the minimum wage. This would lead to a sort of

self-assessed measure of non-compliance that could be very informative and complement the information coming from wages on the share of workers paid below minimum wage. For example, the Irish Labour Force Survey has recently introduced a question that indicates the current minimum wage rate to the respondents and asks them

if they are paid more than, exactly or less than the minimum wage. Information like this could be very useful to compare with indicators of non-compliance calculated using information on pay floors. Finally, the collection of data on subminima and on exemption clauses introduced in national legislation could be improved.

Part 2:
Mapping the enforcement
institutions, policies and practices

Introduction

The enforcement of minimum wages is crucial for their effective implementation. The aim of this part of the report is to provide a mapping of the enforcement and supporting practices adopted in the Member States to ensure the application of minimum wages.

By the expression ‘minimum wage enforcement system’ the present study refers to the set of legislation, institutions and measures aimed at guaranteeing and promoting the respect of minimum wage regulations, punishing violations and redressing unlawful situations.

The enforcement dimensions considered in the analysis include:

- the main enforcement institutions and coordination arrangements in place at national and European levels in the EU27, with a focus on labour inspectorates, which are the main institutions involved in the majority of EU countries, and on the enforcement role of the social partners and of other institutions, such as labour courts, tax and social insurance authorities
- the main enforcement approaches and measures adopted in Member States, grouped into two main typologies on the basis of the indications emerging from the literature review: detection and deterrence measures, and preventive/compliance supporting measures

The analysis is based on a review of the comparative literature and data on enforcement systems and of country reports produced by the Network of Eurofound Correspondents on the main enforcement institutions and strategies adopted in the Member States (see Annex 2.5 for a list of contributors from each country). The network’s country reports are based on a review of national documents and interviews with national stakeholders, using a common template and guidelines provided by the core team. Overall, 129 national stakeholders have been interviewed, including representatives of labour inspectorates, the social partners and labour ministries.

This part of the report is structured as follows.

Chapter 1 summarises the main evidence emerging from the literature on the main features of enforcement systems, and the enforcement dimensions to be considered in the mapping exercise.

Chapter 2 presents the main features of the institutional and regulatory set-up of minimum wage enforcement systems in EU countries, with a focus on the main enforcement institutions, the available financial and human resources and their recent developments, and the coordination arrangements in place.

Chapter 3 describes the main strategies/approaches and measures adopted to enforce compliance with minimum wages and their recent developments, with attention to the balance between deterrence and supporting/preventive measures.

Chapter 4 provides an assessment of the effectiveness of and challenges to enforcement systems according to the national stakeholders interviewed by the Network of Eurofound Correspondents.

The final chapter presents the main conclusions, with a focus on the major gaps and challenges that need to be addressed in order to improve compliance with minimum wages in EU Member States.

Several [annexes](#) accompany this part of the report and are published separately as a working paper on the publication web page on the ‘Eurofound papers’ tab. They are as follows: Annex 2.1 provides additional comparative tables; Annex 2.2 presents the questionnaire and guidelines provided by the core team to the Network of Eurofound Correspondents; Annex 2.3 presents the good practices on minimum wage enforcement indicated in the Network of Eurofound Correspondents reports, with comparative tables and good practice fiches; Annex 2.4 includes 27 country fiches summarising the main features of national enforcement systems resulting from the network’s reports. Annex 2.5 is a list of the contributors from the Network of Eurofound Correspondents.

1 Enforcing minimum wages: Evidence from the literature

Although the enforcement of minimum wages is crucial for compliance, little attention has been dedicated in the academic literature to documenting and assessing the measures adopted to support compliance with minimum wages. As underlined by Benassi (2011), the academic literature reveals a gap in research: the minimum wage issue is widely debated as a matter of policy, but its implementation is often left out.

In addition, while several studies have measured the levels of non-compliance, only a few analyse and provide empirical evidence on the effects of enforcement practices on compliance. According to Bhorat et al (2019), there are two explanations for the scarcity of work exploring this causal link: (i) data on enforcement and compliance are limited, and finding appropriate measures for both enforcement and compliance is problematic;²² and (ii) there is an endogeneity problem due to the potentially simultaneous relationship between enforcement and compliance.

The literature on factors influencing compliance/non-compliance ('determinants approach') and on practices to enforce and support minimum wages is mainly focused on developing countries, which present very high rates of non-compliance (Ronconi, 2010; Almeida and Ronconi, 2012; Kanbur et al, 2013; Rani et al, 2013; Ye et al, 2015; Bhorat et al, 2019; Mansoor and O'Neill, 2020). Almeida and Ronconi (2012) in their comparative study present a series of stylised facts on the incidence of enforcement. Characteristics such as firm size, the skills level of the workforce and the degree of market power can all influence a firm's likelihood of being inspected and increase its incentive to comply with minimum wages.

Concerning European countries, Bossler et al (2020), using national administrative data, exploit the variation in enforcement measures that occurred after the introduction of a national minimum wage in Germany in 2015, to analyse their effect on non-compliance.²³ The evidence points to a small compliance-enhancing effect of enforcement measures. The gains in compliance are not offset by more pronounced employment losses in those industries subject to stricter enforcement.

The available literature also analyses the various channels that companies may use to undermine enforcement measures. Firms might hire part-time employees and pay part of their salary off the books, increase overtime hours without proper remuneration or assign workers to a lower

occupational level than the correct one. In complex wage settings, where several collective agreements (and minimum wage rates) are available, firms might also save on labour costs by selecting the most convenient collective agreement. Moreover, in countries where wages are set by industry-wide agreements and there are no clear and certified rules governing who is entitled to bargain, firms can opt out from the national collective bargaining system and sign their own contracts (i.e. 'pirate' agreements²⁴), setting minimum wages below the existing ones (Lucifora and Vigani, 2021). In this context, enforcing compliance with the statutory minimum is particularly important.

According to collective action theory (Olson, 1965; Axelrod, 1984; Ostrom, 1990), compliance among companies (and workers) tends to be based on cost-benefit assessments, comparing the costs of non-compliance (likelihood of being detected, penalties and sanctions, etc.) with its benefits (lower wages, no administrative burden, etc.). At the same time, companies' behaviours are also influenced by values and norms (Benassi, 2011). Moving from these assumptions, in order to improve compliance, enforcement strategies may adopt one of two main approaches: (i) a deterrence approach mainly based on widespread inspections and penalties aimed at detecting and sanctioning violations, or (ii) a more complex holistic approach, combining deterrence measures with more proactive and preventive measures meant to reduce the cost of compliance for companies. Proactive measures include, for example, providing incentives, information and guidance to companies and workers; reducing bureaucratic burdens and simplifying procedures; launching information and awareness campaigns targeted at workers, employers and citizens; supporting capacity building among employer and worker representatives; empowering workers to claim their rights through individual complaints as well as collective action; and involving the social partners in monitoring, encouraging and facilitating compliance (Williams, 2019). In this way holistic approaches are meant to change the cost-benefit ratio of non-compliance by increasing the incentives/benefits of compliance for companies (using what is called a management approach) and/or prevent non-compliance on the basis of a persuasion approach, addressing the different norms and values affecting non-compliance in order to increase awareness and support compliance, in a preventive way.

22 National data on enforcement and compliance are especially scarce for countries where wage floors are set by collective agreements (Eurofound, 2019). In addition, the high rates of non-compliance with sectoral minimum wages found in these countries (Kampelmann et al, 2013) might reflect the fact that information on minimum rates might be more easily available for national than for sectoral minimums (firms may refer to the wrong agreement and pay less than the reference minimum wage).

23 Following the introduction of a national minimum wage in Germany in 2015, employers in a list of industries deemed at high risk of non-compliance were subject to more stringent enforcement requirements, such as an obligation to record hours worked.

24 This term refers to non-representative agreements, often signed by poorly representative organisations. In Italy, for example, collective agreements not coded by INPS – the National Institute for Social Security – are by definition unknown and classified as 'pirate' agreements (Lucifora and Vigani, 2021).

However, the combination of these measures requires adequate capacity and resources in enforcement institutions, effective coordination mechanisms, the involvement of the social partners and other relevant stakeholders, and clear definitions of minimum wages.²⁵

According to Benassi (2011), the empirical evidence provided by the literature on compliance confirms that the aforementioned approaches are complementary, and not mutually exclusive. The holistic approach highlights the importance of monitoring non-compliance, as it prevents free riding and unfair competition and allows actors to adopt measures to defend their rights. Other studies confirm that the combination of persuasion, capacity building and sanctions improves compliance (Braithwaite, 1985; Paternoster and Sampson, 1996; Tallberg, 2002; Hartlapp, 2007). In their research on labour inspections in different sectors, Ayres and Braithwaite (1992) find the use of persuasion and sanctions particularly effective because actors are driven by rational cost-benefit calculations as well as norms and values.²⁶

Williams (2019) illustrates some national differences in the type of measures adopted that emerged from an e-survey on undeclared work carried out in 2017 in the EU28.²⁷ While deterrence measures (especially penalties and workplace inspections) were used in almost every Member State involved in the survey, incentives to make compliance easier were less used. The range of measures adopted was relatively narrow in southern Europe, and western European and Nordic countries used supply-side and demand-side incentives more often than southern or central and eastern European ones. Persuasive and preventive measures were prevalent in Nordic countries, but less common in southern and western European countries (when used in the latter countries, they tended to focus upon the costs of undeclared work rather than the benefits of declared work). Overall, deterrence measures were considered the most effective by survey respondents, followed by measures to improve detection, although with differences across countries. In Nordic countries, detection measures were ranked as more important than penalties, in southern Europe the measures were ranked as equally important, and in central and eastern Europe detection measures were ranked as less important than penalties (Williams, 2019).

In addition, according to the ILO (2016), in the case of minimum wages there is a tendency for inspections to be triggered by complaints rather than by the identification of inspection targets in the context of labour inspection programmes and strategies.

A recent study presents qualitative evidence on enforcement activities by the customs authorities in Germany (Bosch

et al, 2019). A major issue underlined in the study refers to the lack of an overall monitoring strategy, due to a decentralisation of responsibilities and to the lack of a system for pooling resources with other departments (e.g. tax enforcement). The study also reports on alternatives to legal controls and sanctions that may be strengthened or introduced. As an example, researchers from the German Institute for Economic Research propose a 'fair pay' certification for employers documenting working times in an objective and transparent way (Fedorets et al, 2019).

In recent years, the increase in labour market deregulation and the diffusion of new forms of work, accelerated during the COVID-19 pandemic, are making enforcement more complex than in the past. In addition, in some sectors, such as domestic work, enforcing the application of minimum wages and regular employment contracts is particularly difficult, as employers are likely to be households with little knowledge of labour and wage regulations, and little capacity to comply with administrative burdens (ILO, 2016).

The ways in which enforcement institutions, such as labour inspectorates, are able to respond to these trends and risks depend on their legal jurisdictions, their combination of functions and the available human and financial resources. In many countries, budgetary constraints have reduced the financial resources and staff of inspectorates (Walters, 2016).

In order to enhance enforcement, most EU countries are paying more attention to increasing emphasis on voluntary/private intervention (i.e. forms of self-regulation and private initiatives to assess a company's performance with regard to labour standards such as certifications) and on improving detection capacity with the use of data mining and risk assessments based on the sharing of administrative data in collaboration with statistical offices and tax and social protection authorities. In addition, there is growing attention to proactive measures, including strengthening the advisory, guidance and informative role of inspectorates, the use of awareness and information campaigns and of incentives (e.g. ensuring that only organisations complying with minimum wage regulations have access to public procurement and concession contracts), introducing tax rebates and vouchers, and simplifying the administrative burden and the reporting of complaints (ILO, 2016). Greater recourse to agreements with the social partners and non-governmental organisations (NGOs) will also improve the capacity to reach out to those beyond the reach of conventional inspections, such as workers in micro and small enterprises, temporary workers and migrants, platform workers and bogus self-employed workers (Walters, 2016).

²⁵ The effective implementation of minimum wages depends on a system of inspections and sanctions, which require a sufficient number of trained inspectors, with adequate material resources and sufficient power to be able to discharge their duties, as well as effective procedures for the application of penalties in the event of violations. Moreover, affected workers should have access to rapid procedures against any risk of victimisation for having asserted their rights (ILO, 2014).

²⁶ The importance of values and beliefs in affecting behaviours also emerges in studies on other policy fields. For example, Paternoster and Sampson (1996), in their study on corporate crime, come to similar conclusions, arguing that appeals to morality seem to motivate actors more than the threat of punishment.

²⁷ Although the survey was focused on undeclared work, the results relating to enforcement measures can also apply to minimum wages, as enforcement systems tend to be the same. The intention of the survey was to gather information, first, on the extent to which there was a joined-up coordinated approach in each Member State and, second, on the range of policy measures used in each Member State, the dominant policy measures and those considered most effective. The questionnaire was sent to the national representative of each Member State for completion. Responses were received from 23 of the 28 Member States. Of those national representatives coordinating the gathering of the national response to this survey, 15 were from the labour inspectorate of the Member State, 4 from its ministry of labour, 2 from the tax administration, 2 from the customs authority, 1 from a social security institution and 3 from 'other' organisations.

2 Enforcement systems and bodies

Across the European Union, enforcement systems are quite similar, in both the regulatory set-up and the enforcement bodies.

Regulatory set-up for minimum wage enforcement, main enforcement institutions and recent reforms

As of 1 January 2022, 21 out of the 27 Member States had a national statutory minimum wage,²⁸ while in the other six countries minimum wages were set by collective agreements at sectoral level (Austria, Denmark, Finland, Italy and

Sweden).²⁹ Cyprus is a hybrid case: until December 2022 it had occupation-specific statutory minimum wages based on collectively agreed levels, but in January 2023 it introduced a national statutory minimum wage.

Irrespective of how the minimum wage is determined, EU countries have similar enforcement instruments. As shown in Table 1, in 20 Member States enforcement of minimum wages is based on overarching labour regulations, mainly labour codes. Exceptions include Denmark, Finland and Sweden, where minimum wage enforcement is under collective agreements.

Only in Croatia, Ireland, the Netherlands and Slovenia are there specific regulations for the enforcement of minimum wages, as described in Box 1.

Table 1: How the enforcement of minimum wages is regulated in EU Member States

Regulation	Countries
Overarching labour regulation	AT, BE, BG, CY, CZ, DE, EE, EL, ES, FR, FI,* HU, LV, LT, MT, NL,* PL, PT, RO, SK
Specific regulations for the enforcement of minimum wages	HR, IE, NL,* SI
Collective agreements	DK, FI,* SE

Note: * In the Netherlands and Finland different rules apply depending on the case or because enforcement is governed by different types of acts.

Source: Network of Eurofound Correspondents

²⁸ As defined by Eurostat, national statutory minimum wages usually apply to all employees, or at least to a large majority of employees in the country. They are enforced by law, often after consultation with social partners, or directly by a national intersectoral agreement. See 'General overview' in Eurostat (undated).

²⁹ Concerning the other European countries: the UK has a system of minimum wages that includes national living wages for those aged 23 and above, while five of the seven candidate and potential candidate countries have a national minimum wage (Albania, Montenegro, North Macedonia, Serbia and Turkey). In the EFTA countries of Iceland and Norway, minimum wages are set by collective agreements. In Switzerland, the system is mixed: whereas some cantons have established a statutory minimum wage (e.g. Geneva and Neuchâtel) in others the legal floor is set through collective pay agreements ('General overview' in Eurostat, undated).

Box 1: Countries with specific regulations for the enforcement of minimum wages

Croatia: Minimum wages are regulated by the Minimum Wage Act (OG 118/18, 120/21). Supervision of the application of the Minimum Wage Act is provided by labour inspectors from the state inspectorate as established by Article 9 of the act. In 2021, amendments to the Minimum Wage Act entitled inspectors to monitor the respect of the minimum wage and of wage increases as provided in the applicable collective agreement.

Ireland: The national minimum wage is regulated by the National Minimum Wage Act (2000), concerning all the issues related to the enforcement of the minimum wage. The Low Pay Commission Act 2015 provides the Low Pay Commission with the authority to examine the national minimum hourly rate of pay and make recommendations to the relevant ministry respecting the national minimum hourly rate of pay. The minimum wage rate is then set by the ministry. Enforcement is delegated to an inspectorate section of the Workplace Relations Commission (WRC). The inspectorate deals with various compliance issues regarding Irish employment law.

Slovenia: Slovenia has a statutory minimum wage enforced by the Minimum Wage Act, which also states that the supervision of the implementation of this act is performed by the Labour Inspectorate of the Republic of Slovenia. Other aspects of wage or salary payment are regulated by the Employment Relationships Act.

Netherlands: According to Article 1.1 of the Appointment Regulation for Supervising Officials with Specific Tasks, based on regulations on social affairs and employment, the officials of the Dutch Labour Inspectorate of the Ministry of Social Affairs and Employment (Sociale Zaken en Werkgelegenheid) are charged with the supervision of compliance with the provisions of the Minimum Wage and Minimum Holiday Allowance Act. The officials supervise eight other laws related to fair and equal working rights. In addition, the policy rule on administrative enforcement of the Minimum Wage and Minimum Holiday Allowance Act 2018 describes the fines for specific violations.

Source: Network of Eurofound Correspondents

In some countries there are also regulations/procedures for the enforcement of minimum wages in specific sectors/industries (agriculture, construction, tourism, personal services, etc.), territorial areas or groups of workers (e.g. migrant workers, posted workers, self-employed workers, teleworkers) that tend to present a higher (expected) incidence of non-compliance. For example, in **Germany**, the Act to Combat Undeclared Work and Unlawful Employment (*Schwarzarbeitsbekämpfungsgesetz*) and the Minimum Wage Act (*Mindestlohngesetz*) contain specific provisions for sectors at higher risk of non-compliance, for example by requiring that workers always carry identification documents and by defining specific working-time accounting procedures for employers.³⁰ In addition, based on a risk assessment, authorities can agree a certain number of inspections for sectors known for minimum

wage violations. In **Ireland**, in addition to the provisions of the Minimum Wage Acts for setting the general national minimum wage, minimum wages are also set by sectoral employment orders and employment regulation orders. Sectoral employment orders can set pay, pension and sick pay for workers belonging to a particular sector, such as construction (WRC, undated-a), and employment regulation orders fix minimum rates of pay and conditions of employment for workers in particular business sectors (WRC, undated-b).

Specific enforcement regulations mostly concern the construction sector, as well as foreign workers/companies and, in particular, posted workers, as shown in Table 2.³¹ Table I-1 in Annex 2.1 provides a comparative overview across countries and a more detailed description of such regulations.

³⁰ Such sectors are construction, hotels, restaurants and catering, transport and logistics, forestry, cleaning, fairs and exhibitions, meat, prostitution and security.

³¹ A posted worker is an employee who is sent by their employer to carry out a service in another EU Member State on a temporary basis, in the context of a contract for services, an intragroup posting or hiring out through a temporary agency. For example, a service provider may win a contract in another country and send its employees there to carry out the contract. Posted workers are different from EU mobile workers in that they remain in the host Member State only temporarily and do not integrate into its labour market.

Table 2: Specific minimum wage enforcement regulations/procedures according to national experts

Country	Specific minimum wage enforcement regulations or procedures
AT	Construction sector; posted workers
BE	Sectoral collective agreements
DE	Sectoral collective agreements; specific obligations for certain sectors
DK	Foreign companies operating in DK; construction sector
FR	Forestry and fishing
HR	Construction sector
IE	Mechanical engineering contracting sector; construction sector; electrical contracting sector; security industry; cleaning services
LT	Construction sector
MT	Self-employed workers; posted workers; temporary agency workers
NL	Foreign workers; construction sector

Source: Network of Eurofound Correspondents

As shown in Table 3, in the majority of EU countries (19 Member States) labour inspectorates are the main bodies involved in minimum wage enforcement, together – although to varying degrees and in different ways depending on the country – with labour courts, tax authorities and social insurance authorities. In some countries (Austria, Finland, Hungary) there is more than one institution directly responsible for the enforcement of minimum wages, as described below.

The social partners also play a key role in the enforcement of labour legislation and minimum wage regulation, and

in Nordic countries (Denmark, Finland, Sweden) they also have a direct inspection role to check the application of collective agreements on minimum wages. In some countries, participative forms of control, involving the social partners, employers or civil society organisations, are more common than in others.

Self-enforcement controls by companies or the social partners are also possible, although their role has declined with the decline in bargaining coverage (Bosch et al, 2019).

Table 3: Institutions involved in minimum wage enforcement across countries

Country	Main enforcement institution	Other institutions and/or stakeholders involved
AT	Social security institutions; tax authority	Finance police; district administrative bodies; labour courts
BE	Labour inspectorate	Labour courts; labour auditors; social security inspectorate
BG	Labour inspectorate	Social security and tax authority
CY	Labour inspectorate	Labour courts
CZ	Labour inspectorate	Social security administration; employment offices
DE	Customs authority	Social security administration
DK	Social partners	Labour courts
EE	Labour inspectorate	Tax and customs authority; civil courts
EL	Labour inspectorate	Social security inspectorate; courts; Ministry of Finance; National Transparency Authority
ES	Labour inspectorate	Labour courts; social security administration
FI	Regional administrative agencies; social partners	Courts; police
FR	Labour inspectorate	Labour courts
HR	Labour inspectorate	Labour courts; tax authority; Ministry of Finance; statistics office
HU	Regional administrative offices; Employment Supervision Authority	Tax and customs authority
IE	WRC	Labour courts
IT	Labour inspectorate	Courts; social security administration; National Council for Economics and Labour
LT	Labour inspectorate	Social security administration; tax authority
LU	Labour inspectorate	Labour courts; Standing Committee on Labour and Employment
LV	Labour inspectorate	Courts
MT	Department for Industrial and Employment Relations	Courts
NL	Labour inspectorate	Courts; tax authority; social security administration
PL	Labour inspectorate	Labour courts
PT	Labour inspectorate	Labour courts; social security administration; tax authority
RO	Labour inspectorate	Courts
SE	Social partners	Labour courts
SI	Labour inspectorate	Labour courts; statistical offices; Ministry of Finance
SK	Labour inspectorate	Courts; social insurance administration

Source: Network of Eurofound Correspondents

In the last two decades, in several Member States there have been important reforms of enforcement systems and regulations. Table 4 provides an overview of the main reforms reported by the Network of Eurofound Correspondents.

These include:

- structural reforms, as in **Austria**, where the 2011 Act against Wage and Social Dumping (now the *Lohn- und Sozialdumping-Bekämpfungsgesetz*, LSD-BG) introduced relevant changes in enforcement regulations
- reforms of labour inspectorates (as in Cyprus, France, Greece, Hungary, Italy and Poland), which in some cases, as in **France**, went in the direction

of specialising certain teams within generalist institutions, while others (such as **Italy**) merged different specialised inspectorates into a single generalist one, or increased the inspectorate's legal powers (such as **Cyprus**)

- changes in the type and intensity of sanctions (as in **Bulgaria** and **Latvia**)
- reforms of information access and information sharing (such as the introduction of a transparent employee identification information system in **Lithuania**)
- the creation of competent groups/commissions (as in **Finland**, where a tripartite working group was created to define new ways to intervene in intentional or grossly negligent underpayment, and **Ireland**)

Table 4: Examples of reforms of enforcement systems/regulations

Country	Main reforms
AT	With the 2011 LSD-BG, for the first time, employers who paid below the minimum wage could be not only brought to court but also sanctioned for their violations. From that moment, employees did not necessarily have to sue an employer to enforce their rights but could rely on an enforcement body, which could sanction the employer. The latest amendments have been in force since September 2021.
BG	The 2002 amendments of the Labour Code introduced the obligation to register with the National Revenue Agency any new labour contract, the termination of a contract and the conclusion of supplementary agreement to existing contracts. In 2012, heavier sanctions were introduced for non-compliant employers.
CY	In 2020, a unified Service of Labour Inspections was created to strengthen control and enforcement activities. The reform increased the labour inspectorates' capacities both in terms of legal powers and in personnel.
DE	Following the introduction of the Minimum Wage Act in 2015 and the reform of the Act to Combat Undeclared Work and Unlawful Employment (<i>Schwarzarbeitsbekämpfungsgesetz</i>) in 2019, the powers and resources of customs authorities are being increased with an additional 3,500 staff by 2030.
EL	Recent reforms not directly related to minimum wage but that may affect its enforcement include: <ul style="list-style-type: none"> ○ in 2016, Ministerial Decision 34331/Δ9.8920/2016 introducing the simplification of procedures for the Labour Inspectorate (SEPE) through the Integrated Information System of the SEPE ○ in 2019, Ministerial Decision 60201/D7.14422/2019 introducing a classification of violations and recalculation/reduction of the amount of fines for infringing undertakings ○ at the end of 2021, Law 4808/2021 recognising the SEPE as an independent authority, removing it from the political supervision, control and responsibility of the Ministry of Labour
FI	Besides binding collective agreements, relevant reforms for minimum wage enforcement were: <ul style="list-style-type: none"> ○ the 2016 reform on information sharing, allowing enforcement institutions to have access to information collected by other authorities ○ in 2020, the creation of a tripartite working group operative until 2023, to define new ways to intervene in cases of intentional or grossly negligent underpayment; so far, no concrete measures have been introduced
FR	In 2009, the sectoral labour inspectorates for agriculture and transport were merged with the general labour inspectorate. In 2015, specialised teams were created in the labour inspectorate to improve their effectiveness and to respond to more complex or large-scale frauds.
HR	In 2021, the Amendment of the Minimum Wage Act (OG 120/21) extended the definition of statutory minimum wage to those defined in extended collective agreements. Therefore, inspectors are now entitled to monitor the respect of the minimum wage and wage increases as provided in the applicable collective agreement. The amendment also broadens the employer's misdemeanour liability. A ministerial decision on the Commission on the Minimum Wage (OG 136/21) strengthens the role of the Expert Commission for Monitoring and Analysis of the Minimum Wage and extends its tasks.
HU	In 2020, the role of the labour inspectorates was taken over by the Employment Supervision Authority. The supervision was transferred from the Ministry of Finance to the Ministry of Innovation and Technology.
IE	In 2015, the WRC was established, taking up the functions carried out by a diverse range of state agencies dealing with different aspects of overall compliance with employment law. Since the Minimum Wage Act in 2000, no major changes have occurred and none are planned.
IT	In 2015, a National Labour Inspectorate was established by Legislative Decree No. 149/2015, merging the inspection activities previously carried out by the Ministry of Labour and Social Policies, the National Institute for Social Security and the National Institute for Insurance against Accidents at Work.
LT	The major reforms include: <ul style="list-style-type: none"> ○ the prohibition of paying minimum wages for skilled labour, under the new Labour Code on 1 July 2017 ○ the introduction of the social insurance contribution floor in 2018 ○ the transparent employee identification information system in the construction sector since 1 April 2022, with all workers on construction sites (employees, self-employed, posted workers) having to register in the system and hold a construction worker ID number
LV	Section 61, paragraph 4, of the Labour Law (27 May 2021) introduced a norm stating that minimum wages determined in sectoral agreements have the same legal consequences as statutory minimum wages.

Country	Main reforms
NL	A 2018 amendment to the Minimum Wage Act provides that employees must receive at least the applicable minimum wage for all hours worked. Compensation for overtime or additional work is only possible if this has been arranged in a collective agreement.
PL	Since 2017, the National Labour Inspectorate has to check the respect of hourly minimum wages for workers with civil law contracts. A 2016 amendment to the Public Procurement Act provides that contractors and subcontractors must hire employees under an employment contract. A reform is planned to give new powers to labour inspectors to convert unauthorised civil law contracts into employment contracts.

Sources: Network of Eurofound Correspondents, and *handwerk.com* (2019) for Germany

The following sections present a more detailed description of enforcement bodies and the main arrangements in place in Member States for cooperation among them and with other stakeholders, and for dispute resolution, as well as the main reforms implemented in the last few decades in EU countries.

Roles and resources of labour inspectorates and other public enforcement institutions

Roles

Labour inspectorates are the main body responsible for the enforcement of minimum wage regulations in 19 Member States. The status and functions of labour inspectors are normally set out in general labour legislation, for example labour codes, or in the general legislation on wages (ILO, 2014).

The mandates of labour inspectorates are, however, quite diverse across the EU. Although they share a common basis under ILO Convention No. 81, adopted in 1947, the structure and functions of national inspectorates and their position in the legal system vary considerably between Member States (Walters, 2016). A major distinction is their degree of independence, and whether they are decentralised or operate directly under the authority of central government administrations (European Platform tackling undeclared work, 2020).

In all countries the labour inspectorates and the other public institutions involved in the enforcement of minimum wage regulations are generalist bodies that deal with the whole spectrum of labour laws. These institutions rarely have departments or offices specifically dedicated to monitoring and ensuring compliance with minimum wages, and enforcement activities (e.g. inspections, checks) normally have a broader scope and do not focus solely on minimum wages.

Their functions include verifying compliance with regulations by carrying out checks and inspections, receiving and investigating reports of possible violations,

imposing sanctions or requiring the application of sanctions, and providing advice, support and legal counselling to both employers and workers. Regarding minimum wages, in most cases labour inspectorates include verifying compliance with minimum wage regulations in their usual activities (routine inspections, checks and controls of contracts and payments, etc.), and minimum wage compliance is often dealt with in relation to the wider issue of undeclared work, tax evasion or social contribution fraud.

Inspectorates in most countries are managed centrally and are accountable to central government. Depending on national legislation, they may fall under the authority of the ministry of labour or of other ministries or institutions (e.g. in Estonia, Latvia and Poland³²). Only in Greece and Spain are they independent authorities.³³

In general, labour inspectorates have a central office that coordinates the activities of the inspectorate, defines the priorities and supervises the activities of the regional/local offices. In addition to the central headquarters, inspectorates are often organised in territorial units at regional, provincial or local level. In **Czechia**, for instance, the State Labour Inspection Office has eight regional labour inspectorates, in charge of enforcing labour laws in their areas of competence. In **Italy**, territorial units in charge of the ordinary inspection work are organised at provincial level, with four cross-regional coordinating bodies. In **Poland**, the 16 district labour inspectorates are further divided into 42 subdistricts.

Although in many cases the territorial units are subordinate to the central offices of the labour inspectorate, there are cases in which regional labour inspectorates are independent authorities. An example is **Spain**, where the labour inspectorate (*Inspección de Trabajo y Seguridad Social*) has local offices in each region, except for Catalonia and the Basque Country, which have their own labour inspectorates.

In many EU countries, labour inspectorates can adopt specific procedures or allocate specific resources to enforcement activities for sectors where the risk of non-compliance is higher. For example, in the **Netherlands**, the labour inspectorate has specific programmes for 11 sectors

32 In Poland, the National Labour Inspectorate is subordinate to the Lower Chamber of Parliament and it is supervised by the Labour Protection Council, appointed by the chairman of the Lower Chamber. In Estonia the Labour Inspectorate is under the Ministry of Social Affairs, while in Latvia it is under the Ministry of Welfare.

33 In Greece, the labour inspectorate was separated from the supervision of the Ministry of Labour in 2021 and was transformed into an independent body named the Independent Labour Inspection Authority; in Spain, the inspectorate became independent following a reform in 2015.

exposed to a higher risk of labour law violations.³⁴ In **Greece**, the SEPE department or the Director can decide to carry out targeted inspections for sectors with high levels of non-compliance, while in **Italy** the National Labour Inspectorate shapes its vigilance activity on the basis of the sectors, territories and groups of workers considered most at risk.

Enforcement institutions can also be organised on a sectoral basis or create specific units to ensure greater vigilance in relation to certain sectors, areas or groups of workers. In **Belgium**, labour inspectorates are organised by region or sector, and within each subdivision specialised sections form to react to trends such as posted workers.

In some cases, the offices are internally structured by function and field of activity. This is the case, for instance, with the State Labour Inspectorate of **Latvia**, where the central office in Riga is organised in four sections: labour protection supervision; mediation and legal compliance; labour law supervision; prevention and rapid response.

The **Dutch** labour inspectorate is divided into 11 sections with specialised programmes for different sectors and 12 programmes that cover issues that are not industry-specific and affect all or multiple sectors; the organisation of the inspectorate varies in response to risks of non-compliance. In particular, the section 'Sham structures and compliance with collective agreements' has the authority to enforce minimum wage regulations.

Labour inspectorates or other enforcement institutions sometimes have tripartite representation on their board. For example, in **Romania**, social partners' representatives are members of the Consultative Council (*Consiliul Consultativ Tripartit*) of the labour inspectorate. The council has an advisory role and aims to ensure the implementation of social dialogue at inspectorate level.

In some countries the enforcement of labour laws, including minimum wage regulations, does not fall under the responsibility of labour inspectorates. Instead, this task belongs to other public institutions, as illustrated in Box 2.

Box 2: Other enforcement institutions

In **Austria**, the Austrian Health Insurance Fund (ÖGK) and the Audit Service for Payroll Taxes and Contributions, under the Ministry of Finance, are in charge of the enforcement of minimum wage regulations for workers employed by Austrian companies according to the LSD-BG (§11). These two institutions carry out audits and verify the payment of all wage-related levies borne by the employer (social security, wage taxes and municipal taxes) as well as wages. The investigative and control unit of the Anti-Fraud Office of the Ministry of Finance (the finance police), is in charge of detecting violations of the provisions of the LSD-BG. Its activities include (on-site) checks in companies, business premises and external workplaces as well as checks of the employees. On the basis of these investigations, the Competence Centre for combating wage and social dumping, situated within the ÖGK, carries out the controls on wages. In both cases, violations must be reported to the responsible district administrative authority, which can impose penalties on the employer. The Construction Workers' Annual Leave and Severance Pay Fund (*Bauarbeiter-Urlaubs- und Abfertigungskasse*, BUAK) is responsible for inspections, checks and controls in the construction sector to verify compliance with reporting obligations arising from the Construction Workers' Leave and Severance Pay Act. In this context, BUAK's inspection bodies also enforce the Act against Social and Wage Dumping.

In **Germany**, customs authorities are tasked with the enforcement of minimum wage regulations. In particular, the Financial Control of Undeclared Work (*Finanzkontrolle Schwarzarbeit*, FKS) units of the Central Customs Authority are responsible for detecting undeclared work and unlawful employment, which include violations of minimum wages. The Central Customs Authority is under the supervision of the Ministry of Finance and is organised in 41 main customs offices and 250 local offices, each with a local FKS unit in charge of inspections and checks in its district. Furthermore, eight customs investigation offices, in charge of customs-related criminal and administrative offences, are located all over Germany.

In **Hungary**, at the time of the research the enforcement of labour regulations is coordinated by the Employment Supervision Management Department (now called the Employment Supervision Authority) of the Ministry of Innovation and Technology, which took the place of labour inspectorates following a reform in 2020. As of December 2022, the authority was moved under the supervision of the Ministry for Economic Development. The authority is responsible for the planning of inspections and for the evaluation of their results, being a management and supervisory body. Actual enforcement activities – including inspections – are carried out at local level by the capital and county government offices, responsible for the local administration of all public tasks (e.g. social and family policies, housing, oversight of the environment, heritage protection, issuing documents, labour protection and employment supervision).

³⁴ Asbestos removal; companies with hazardous materials (chemicals, petrochemicals and petroleum; plastics and rubber); construction and infrastructure; government services; hospitality and retail; agriculture and horticulture; shipbuilding and maintenance; cleaning; transport and logistics; temporary employment and secondment; care and welfare (Nederlandse Arbeidsinspectie, undated).

In **Ireland**, the institution responsible is the WRC, an independent and statutory body established under the 2015 Workplace Relations Act. It assumed the roles and functions previously carried out by different institutions such as the National Employment Rights Authority, Equality Tribunal, Labour Relations Commission, Rights Commissioners Service and first instance (complaints and referrals) functions of the Employment Appeals Tribunal. The WRC's role includes the implementation of labour legislation, the provision of information, and mediation, conciliation and advisory services. In particular, it has an inspectorate section that specifically deals with the application of employment law. The WRC is the sole body in Ireland charged with the authority to oversee the enforcement of minimum wage provisions, under the Minimum Wage Act in the case of the national minimum wage, and under sector employment orders and employment regulation orders in respect of sector-specific agreements on minimum wage provisions.

Finally, in **Malta**, the institution responsible is the Department for Industrial and Employment Relations of the Office of the Prime Minister. The department has a generalist scope, dealing with all aspects of employment and industrial relations legislation. The enforcement branch of the department is made up of two sections: the Inspectorate Section, which monitors the respect of employment legislation and investigates the complaints made by workers, and the Customer Care Section, which serves a contact point for the general public. The role of the Inspectorate Section is defined by the Employment and Industrial Relations Act. Besides processing complaints and carrying out inspections, the section is also responsible for referral of cases to courts.

Source: *Network of Eurofound Correspondents*

Resources: Change over time

According to the ILO (2006, 2016, 2022), in order to assess the capacity of labour inspection systems in ensuring enforcement, the following criteria should be considered: the financial resources allocated to enforcement activities, the number of inspectors and their training, the number of inspections undertaken, the size and nature of the workplace, the number and types of workers to be inspected per enterprise, the number and complexity of the legal provisions to be enforced, and the penalties imposed.

There are very limited comparative data and indicators on the inspection capacity of EU Member States. The main source of comparative data is 'ILO indicators on labour inspectorates' in Ilostat.³⁵ These data provide some information on the activities of labour inspectorates in European countries, covering inspectorates' activities in general, with a focus on those addressing occupational safety and health risks, while they do not include information on the staff and activities specifically devoted to minimum wage enforcement.

Detailed ILO data on labour inspectors and labour inspection visits in the 22 Member States for which data are available and their changes over time are reported in Tables I-9 to I-12 in Annex 2.1.³⁶ The ILO indicators show that capacity and resources are very different across EU countries, with mixed evidence concerning the trends in human resources and inspection activities, which could also reflect the wide differences in data availability across countries.

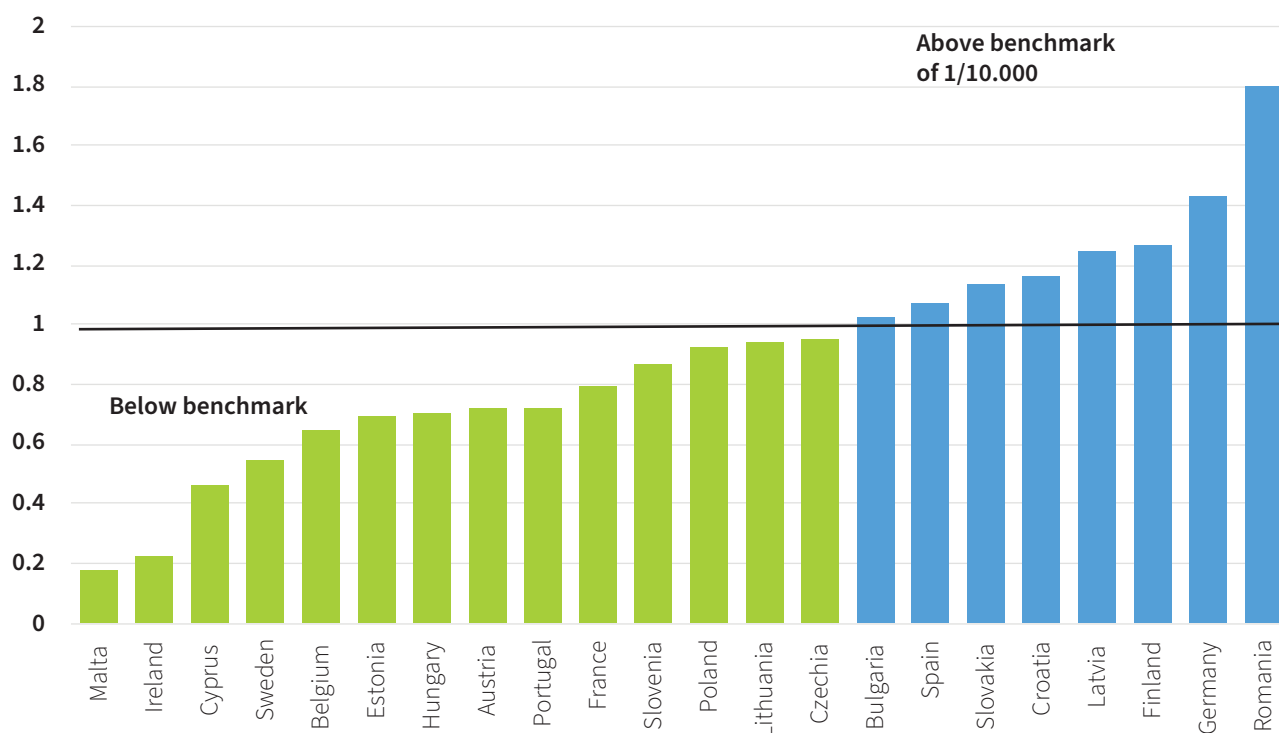
The ILO's indicator on the number of inspectors per 10,000 employed persons, presented in Figure 1, shows wide differences across countries, going from Ireland with 0.22 to Romania with 1.8 in 2021. The changes over 2009–2021 show that in nine EU countries (Bulgaria, Croatia, Finland, Germany, Latvia, Lithuania, Romania, Slovakia and Spain) the number has always been above 1, considered by ILO the benchmark for a sufficient number of inspectors per 10,000 employed persons in industrial market economies, while Romania reports values higher than 2 from 2009 to 2012, with a peak in 2011 (2.25 inspectors per 10,000 employed persons).³⁷ The lowest value is reported in Malta in 2011, with 0.18 inspectors per 10,000 employed persons.

³⁵ Ilostat presents information on various indicators about labour inspections obtained from national sources. It reports statistics on labour inspection visits, the number of inspectors per 10,000 persons employed, and the average number of labour inspection visits conducted per inspector. Detailed statistics on the number of registered workplaces that could be selected for labour inspection, and the number of labour inspectors by sex, are also available. The ILO Travail database also collects data on minimum wages, including enforcement mechanisms: the section 'Control mechanism' sets out the bodies, such as labour inspectorates, that ensure compliance with minimum wage legislation. It also provides the amounts of fines that may be applied in the event of non-compliance, along with any other penalties that may be levied, such as imprisonment. However, the latest update is 2012.

³⁶ No data are available for Denmark, Greece, Italy, Luxembourg and the Netherlands.

³⁷ For some countries the periods covered are shorter. For example, in Belgium observations are just for 2017, 2018 and 2019. In Malta, observations are from 2009 to 2012. Other countries have missing values in the series. See Annex 2.1.

Figure 1: Average number of labour inspectors per 10,000 employed persons, 2021 (or latest year available)



Notes: Austria, Germany, Latvia and Portugal, 2020; Belgium and France, 2019; Malta, 2011. No data available for Denmark, Greece, Italy, Luxembourg and the Netherlands.

Austria, Bulgaria, Croatia, Czechia, Ireland, Latvia, Poland, Portugal, Romania, Slovakia and Spain: data reference period, end of the year.

Belgium: institutional sector coverage, private sector only.

Germany and Slovenia: reference group coverage, insured person.

The benchmark for a sufficient number of inspectors per 10,000 workers in industrial market economies is 1 (ILO, 2006).

Source: Ilostat

ILO data on the variation in the number of inspectors are available for a period sufficient to be considered from only 20 countries. Belgium and Malta have been excluded, due to limited data availability. As already mentioned, the time period considered is from 2009 to 2021, although for some countries the periods covered are shorter: Austria, Germany and Portugal (2009–2020); Croatia, Finland, Latvia and Spain (2011–2021); Bulgaria and Sweden (2013–2021); France (2013–2019).

As shown in Table 5, in 10 of these 20 countries the number of inspectors decreased between 2009 and

2021, while in the other 10 it increased. Among the countries where the number of inspectors increased, the most significant increases are found in Czechia (+183 inspectors, +58.1%), Portugal (+93, +36.8%) and Spain (+250, +13.4%), indicating a strengthening of enforcement activities in the period considered. Among the countries registering a reduction in the number of inspectors, the fall has been particularly significant in Lithuania (-79 inspectors, -38.0%), Romania (-565, -28.8%), Ireland (-18, -25.4%) and Croatia (-57, -22.6%).

Table 5: Number of inspectors (latest year available) and variation in the number of inspectors over 2009–2021

Country	Number of inspectors in latest year available	Variation (absolute number)	Variation (%)
Romania	1,394	-565	-28.8
Germany	5,919	-85	-1.4
Lithuania	129	-79	-38.0
Croatia	195	-57	-22.6
Slovakia	292	-53	-15.4
Hungary	325	-30	-8.5
Ireland	53	-18	-25.4
Austria	312	-6	-1.9
Cyprus	20	-2	-9.1
Estonia	45	-1	-2.2
Latvia	112	1	0.9
Slovenia	85	2	2.4
Bulgaria	316	4	1.3
Finland	327	16	5.1
Sweden	280	24	9.4
Poland	1,526	37	2.5
France	2,175	74	3.5
Portugal	346	93	36.8
Czechia	498	183	58.1
Spain	2,115	250	13.4

Notes: Austria, Germany and Portugal, 2009–2020; Croatia, Finland, Latvia and Spain, 2011–2021; Bulgaria and Sweden, 2013–2021; France, 2013–2019. Belgium and Malta not included due to short series. No data available for Denmark, Greece, Italy, Luxembourg and the Netherlands.

Austria, Bulgaria, Croatia, Czechia, Ireland, Latvia, Poland, Portugal, Romania, Slovakia and Spain: data reference period, end of the year.

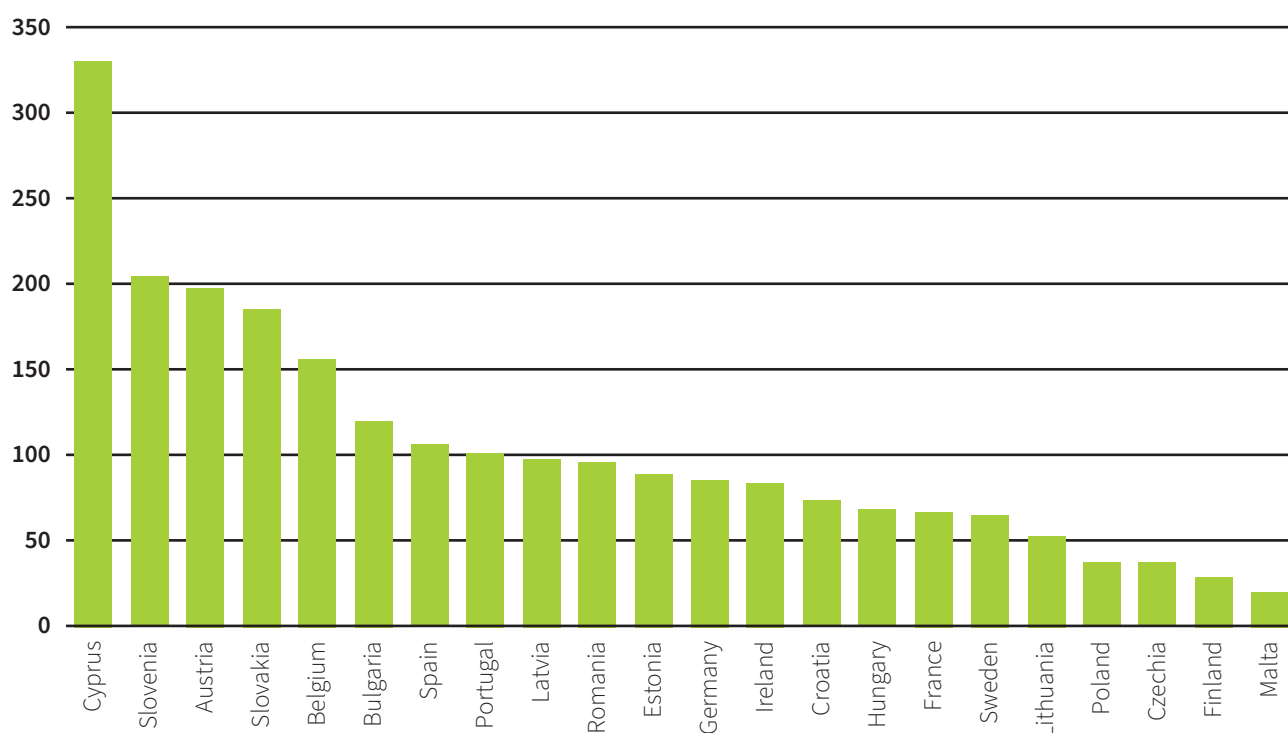
Germany and Slovenia: reference group coverage, insured person.

Source: Ilostat

The number of labour inspections shows a declining trend in 18 out of 20 countries (Belgium and Malta have been excluded, due to limited data availability) in period considered (2009–2021), depending on data availability, as reported in Table I-10 in Annex 2.1. The exceptions are Cyprus (+26.3%) and Slovakia (+38%). The negative trend is particularly evident in Finland (-9,176 inspections, -58.8%) and Portugal (-34,816, -57.1%), despite the increase in the number of inspectors, and in Lithuania (-6,771, -58%) and Ireland (-4,432, -50%). In particular, in all the countries considered, the number of inspections declined in 2020 and 2021 due to the consequences of the COVID-19 pandemic, when, on the one hand, many activities were suspended and, on the other, most of the enforcement activity was concentrated on the investigation of suspected cases of occupational disease related to COVID-19. A possible explanation of the overall declining

trend in workplace inspection is the increasing use of data matching and sharing, making it possible to detect cases at higher risk of non-compliance and target inspections on them. The number of labour inspection visits per inspector in 2021 (Figure 2) is lower than the ILO threshold of 200 inspection visits per inspector in 20 of the 22 countries for which data are available, with the only exceptions being Cyprus and Slovenia. This indicator registers a decline in 16 countries, and is related to the decline in the number of inspections. In Czechia, Finland, France, Hungary, Lithuania and Poland there are fewer than 100 inspection visits per inspector, while Austria, Cyprus, Slovakia and Slovenia exceed the threshold in some years, with the highest values registered in Cyprus in 2020 and Malta in 2010, with 335 and 424 inspection visits per inspector respectively.

Figure 2: Average number of inspection visits per inspector, 2021 (or latest year available)



Notes: Finland, Germany, Portugal and Slovenia, 2020; Austria, Belgium and France, 2019. No data available for Denmark, Greece, Italy, Luxembourg and the Netherlands.

Austria, Bulgaria, Croatia, Czechia, Ireland, Latvia, Poland, Portugal, Romania, Slovakia and Spain: data reference period, end of the year.

Belgium: institutional sector coverage, private sector only.

Germany and Slovenia: reference group coverage, insured person.

Source: Ilostat

As mentioned above, ILO data concern labour inspectorates and their activities in general and do not include information on the staff and resources specifically devoted to minimum wage enforcement. To integrate these data, the Network of Eurofound Correspondents was asked to collect available information at national level on the financial and human resources specifically allocated to the enforcement of minimum wages.

As regards the financial resources allocated to enforcement institutions (labour inspectorates or other enforcement bodies), information collected by the network covers only 14 countries: Czechia, Denmark, Finland, France, Greece, Ireland, Latvia, Lithuania, the Netherlands, Poland, Portugal, Romania, Slovenia and Spain (see Table I-3b in Annex 2.1). In all these countries, with the exception of Portugal, financial

allocations have increased over the last decade, although at different rates. Only in Portugal has funding decreased.

According to the information collected, stakeholders interviewed consider these resources in many cases only partially adequate for effective enforcement activities (Table 6). More resources would allow inspectors to carry out more careful controls and increase the effectiveness of inspections. Only in Cyprus and in Denmark are available resources considered very adequate and have they increased in the last decade, although data for Denmark only refer to the Labour Court and do not include those resources that social partners dedicate to the enforcement of collective agreements. Financial allocations are considered not adequate in Belgium, France, Poland, Portugal and Romania.

Table 6: Variation and adequacy of funding according to interviewed stakeholders

Adequacy of funding	Changes in funding in the last decade			
	Increased	Stable	Decreased	N/A
Very adequate	CY, DK			SE
Partially adequate	CZ, EL, ES, FI, LT, LV, NL, SI	AT, EE, HU, SK		HR, MT
Not adequate	PL, RO	BE	PT	FR
N/A	IE			BG, DE, IT, LU

Note: N/A, not available.

Source: Network of Eurofound Correspondents

Information on the human resources (employees) in enforcement institutions presents a mixed picture and some differences from the ILO data on the numbers of inspectors presented above. As shown in Table 7, according to the Network of Eurofound Correspondents reports, the staff numbers of enforcement institutions in the last decade have increased in 14 of the 25 countries for which these data are reported, while they have decreased in 5.³⁸ These trends correspond to those presented in ILO data (whenever a comparison is possible) with the exceptions of Cyprus, Germany, Ireland (all reported as increasing, while decreasing according to ILO data), Hungary (reported as stable, while decreasing according to ILO data), Austria (reported as stable, while decreasing with ILO data), France and Poland (both reported as decreasing, while increasing according to ILO data).

Despite the increase in human resources in most countries, the majority of the national stakeholders interviewed consider the number of staff in their countries to be only partially adequate. As shown in Table 7, only in the three Nordic countries, Cyprus and Hungary are human

resources are considered very adequate, while in four countries they are considered not adequate at all.

Of the countries reported in Part 1 of this report as having non-compliance levels consistently lower than the median, most are shown as having very adequate or at least partially adequate human resources, with stable/increasing trends in their staff in the last decade.

This relationship is less clear when considering financial resources, partly because of the lack of information, due to the limited use of monitoring and data collection systems on enforcement activities. See Box 3, illustrating the main monitoring arrangements reported by the country experts for 14 countries. Among these, only 4 countries (Belgium, Croatia, Poland and Portugal) have specific data collection systems on minimum wage enforcement in place, while in the other 10 general information on inspections and violations is reported in the enforcement institution's annual reports. According to Network of Eurofound Correspondents reports, in the remaining Member States there are no systems in place to monitor or collect data on the enforcement of minimum wages.

Table 7: Adequacy of human resources and recent trends according to stakeholders interviewed

Adequacy of staff	Changes in staff in the last decade			
	Increased	Stable	Decreased	N/A
Very adequate	CY, FI, SE	DK, HU		
Partially adequate	CZ, EL, ES, IE, LV, MT, NL, PT, SI	AT, BG, EE	FR, HR, LT	SK
Not adequate		BE	PL, RO	IT
N/A	DE, LU			

Note: N/A, not available.

Source: Network of Eurofound Correspondents

Box 3: Monitoring and data collection on enforcement activities

In **Austria**, there is no system for monitoring and data collection on minimum wage enforcement in place. Data on breaches of the LSD-BG are collected by the Federal Ministry of Labour. Among data collected by the Federal Ministry of Labour, violations classified under the category 'underpayment' are not limited to non-compliance with minimum wages but include other violations.

In **Belgium**, the labour inspectorate presents annual reports that provide information on the number of inspections and their results regarding all laws they are responsible for enforcing, including minimum wage regulations.

In **Croatia**, the Croatian Bureau of Statistics collects and analyses data directly and indirectly related to the issue of minimum wage compliance among companies and workers. Data are available only on demand. In 2018, a Commission for the Monitoring and Analysis of Minimum Wages was established to assist the government in policymaking. The commission is a consultative body, analysing recent trends relevant to minimum wage policy and proposing the minimum wage level for the next year.

In **Cyprus**, data about enforcement activities are collected monthly by the Department of Labour Relations and a report is sent to the Minister of Labour, Welfare and Social Insurance, but it is not specific to the minimum wage.

In **Czechia**, the State Labour Inspection Office publishes an annual summary report on the results of its inspections. The report contains a summary description of the various findings, including employees' remuneration and compliance with minimum wages.

³⁸ Data reported by the network indicate only in some cases the number of people devoted to minimum wage enforcement, while in the majority of cases they concern the human resources of the institution in general. See Table I-3 in Annex 2.1 for a complete description.

In **France**, the labour inspectorate provides a report on its activities every year, with data on the number of letters sent to employers, the number of contraventions and the number of administrative sanctions. Data reported may include information on minimum wages.

In **Ireland**, although no specific monitoring system is in place, the WRC and Low Pay Commission annual reports include some information on the number of inspections carried out and the percentage of those inspections that relate to the minimum wage.

In **Lithuania**, the State Labour Inspectorate monitors the implementation of the Labour Code, and at the end of every year it submits to the government and the parliament a report on the monitoring and an assessment of the results achieved. Reports include the number and classification of violations of the law.

In the **Netherlands**, the labour inspectorate's website reports data about every inspection it carries out, presenting all relevant information and specifying whether a violation has been detected. Therefore, information about non-compliance with minimum wages, and about minimum wage-related enforcement activities, can be found in this inspection database.

In **Poland**, the National Labour Inspectorate is responsible for monitoring and data collection on minimum wage enforcement. The inspectorate's annual reports include data on inspections related to compliance with hourly minimum wages and data on compliance. However, the information reported is aggregated, and the number of inspections related to minimum wage and the number of violations identified are not specified.

In **Portugal**, the Strategy and Planning Office of the Ministry of Labour, Solidarity and Social Security produces annual reports on the implementation of minimum wages, examining the share of workers earning the minimum wage compared with the working population, sectoral and regional prevalence of minimum wages, and their impacts on the labour market. These reports are based on administrative records from a mandatory survey targeting privately and publicly owned companies, and from administrative records of the social security database. In addition, the labour inspectorate publishes annual reports about inspection activities, providing data about cases of non-compliance. These reports also monitor the number of coercive and non-coercive procedures issued annually for non-compliance with labour legislation, specifying the number of cases of non-compliance with the minimum wage.

In **Romania**, the annual report of the national labour inspectorate contains data on controls and sanctions and includes information about sanctions imposed by authorities for non-compliance with minimum wage provisions.

In **Slovakia**, labour inspectorates record data on compliance with labour regulations, which may include information about checks and inspections on minimum wage provisions.

In **Slovenia**, some data on the respect of labour regulations are collected by the relevant enforcement institutions in relation to regular evaluation of their performance. The Ministry of Labour, Family, Social Affairs and Equal Opportunities, though, is in the process of building a general analytical infrastructure that should also allow data collection and monitoring in relation to the minimum wage.

Source: *Network of Eurofound Correspondents*

Role of social partners

Social partners play a key role in the enforcement of labour legislation and minimum wage regulation. Although with some differences depending on their strength and role in different countries, the comparative analysis reveals a wide range of functions of trade unions and employer organisations with regard to the enforcement of minimum wages. While in Nordic countries they have a direct inspection role to enforce the application of collective

agreements, in the other EU Member States they often provide guidance and support to workers and employers, have a role in dispute resolution and have a consultative role in policymaking.

Based on the information provided by the Network of Eurofound Correspondents, Table 8 shows the different functions of social partners and the countries where these functions are carried out.

Table 8: Functions of social partners by country

Function	Countries
Providing advice/support to workers and employers	19 countries: AT, BE, BG, CY, DE, DK, EE, EL, FI, FR, HU, IT, LU, LV, MT, PL, SE, SI, SK
Consultation (e.g. in tripartite bodies)	14 countries: AT, CY, DK, EE, ES, HR, HU, IE, LU, LV, MT, PL, PT, SI
Reporting violations, demanding sanctions and/or proposing inspections (to labour inspectorates or labour courts)	10 countries: BG, CZ, DK, ES, FR, HU, LT, MT, NL, RO
Participation in labour dispute resolution	10 countries: AT, BE, DK, EL, FI, IE, IT, RO, SE, SI
Conducting inspections to ensure the enforcement of collective agreements	3 countries: DK, SE, FI

Source: Network of Eurofound Correspondents

The most common function is the provision of advice and support to employers and workers, a core function of social partners in 19 EU Member States. Social partners also have an important consultative role in 14 countries, being represented in tripartite bodies, where they provide opinions and suggestions and, in some cases, also participate in the policymaking process.

In 10 countries, social partners can also be actively involved in the resolution of labour disputes, mediating between employers and workers when conflicts arise, and in 10 they have the power to report violations to enforcement institutions, demand sanctions or propose inspections to the labour inspectorate or other competent authorities.

Finally, in Nordic countries (Denmark, Finland and Sweden), social partners have the power to conduct inspections to ensure the enforcement of collective agreements.

The involvement of social partners in enforcement activities has increased in 12 Member States, and it has not changed in the remaining countries, except for Czechia, where the unions' power to monitor compliance was reduced by a ruling of the Constitutional Court in 2008.³⁹

Some examples of practices implemented by social partners to support the enforcement of minimum wages are presented in Box 4.

Box 4: Examples of practices implemented by social partners

In **Bulgaria**, the Confederation of Independent Trade Unions in Bulgaria and the Bulgarian Union of Teachers provide training to high-school teachers concerning major labour law provisions (including minimum wage regulations) as part of a project called 'My first workplace'. Trained teachers then provide classes on these issues to leaving students, to support them in their school-to-work transition, and to guarantee that they have basic information on labour regulations and are aware of their rights. This campaign, however, does not reach all schools.

In **Germany**, in 1948, social partners of the construction sector established a joint social security fund called SOKA-BAU. The main tasks of SOKA-BAU are to secure holiday entitlements, co-finance vocational training, manage working time accounts and support pension schemes. The system is based on employee-related reports of wages and wage-payable working hours in construction companies. Thus, it is able to check whether the employees were paid the collectively agreed minimum wage. Domestic construction companies and also foreign posting companies are automatically checked. In the event of anomalies, SOKA-BAU is authorised to request the timesheets, payslips and employment contracts of the employees from the company. Notices of violations are forwarded to the enforcement authority (FKS).

In **Greece**, during the pandemic, the General Confederation of Greek Workers developed the Anti-COVID-19 Employee Information and Support Team, with the participation and cooperation of all its structures (the Information Centre for the Employed and Unemployed, the Labour Institute of the General Confederation of Greek Workers and the Union for Working Consumers of Greece). The team receives requests and complaints from employees, provides legal information to employees and ensures that complaints are forwarded to the competent authorities. Between 10 March 2020 and 31 December 2021, the team handled approximately 38,895 employee queries and complaints. Of these cases, 12% concerned non-payment of the minimum wage and/or the payment of remuneration below the statutory limit. According to the confederation, the contribution of its mechanism to dealing with unlawful conduct and labour disputes, especially during the first wave of the pandemic, is of even greater importance given that the SEPE was underfunctioning at that time.

³⁹ Section 321 of the Czech Labour Code contained provisions that gave trade unions broad powers to monitor compliance with all labour law regulations. The abovementioned ruling of the Constitutional Court, however, stated that there was no acceptable reason to transfer the performance of state administration to trade unions. <https://www.eurofound.europa.eu/publications/article/2008/unions-claim-courts-repeal-of-labour-code-will-diminish-trade-union-role>

In **Malta**, in November 2013, the General Workers' Union and the Malta Employers' Association jointly called for a strategy establishing a minimum wage for public sector tenders in security, cleaning and care services. The government has thus amended public procurement regulations to improve the working conditions of the workers involved. As a result of the amendments, economic operators can be blacklisted for a time if they do not comply with minimum wage provisions while executing government tenders. While the number of companies that have been blacklisted appears to be minimal, the measure still acts as a deterrent.

In the **Netherlands**, social partners and the labour inspectorate exchange information to help strengthen each other's risk analyses: social partners provide information to the labour inspectorate about sectors and subsectors in which, in their opinion, there is a risk of non-compliance, and the labour inspectorate provides information to the social partners so that they can strengthen their activities.

Source: *Network of Eurofound Correspondents*

The next sections each present a more detailed description of one of the functions of social partners under consideration.

Consultation

Social partners are often members of tripartite bodies, where they can make proposals and state their positions in relation to the enforcement of compliance with minimum wages. In some countries they are also directly involved in the decision-making process related to defining the minimum wage level every year. This happens, for example, in **Slovenia**, where social partners can propose a new minimum wage level during their consultation process with the Minister for Labour. In **Croatia**, representatives of social partners propose the new minimum wage level within the Commission on Monitoring and Analysing the Minimum Wage. In **Portugal**, the minimum wage is decided by the government after it has consulted social partners' representatives in the tripartite Standing Committee for Social Concentration, in which they also express their opinions about socioeconomic policies and draft labour legislation.

However, the role of social partners is more often related to general policy issues, and they play a central role in sharing information and reporting to institutional stakeholders on workers' and employers' experiences, thus helping to assess the effectiveness of regulations and measures on minimum wages and other labour issues. In **Ireland**, representatives of trade unions and employer organisations are part of the WRC and of the Low Pay Commission: their participation in these two bodies allows them to contribute to decision-making on various policy issues, and at the same time enables them to influence enforcement mechanisms. In **Spain**,

16 social partner representatives (8 from trade unions and 8 from employer organisations) sit on the General Council of the Labour Inspectorate, whose members make proposals and define the priorities of the labour and social security inspections. In **Luxembourg**, both trade unions and employer organisations can bring issues of serious concern to the attention of the Standing Committee on Labour and Employment, a tripartite body for social dialogue including social partners and the Ministry of Labour. In **Hungary**, at the beginning of the year, social partners discuss the findings of the annual report of the Employment Supervision Management Department, which also deals with the monitoring activities related to compliance with minimum wages. Social partners can also make recommendations in the framework of the Permanent Consultation Forum of the Government and the Competitive Sector. In **Latvia**, within the Tripartite Labour Subcouncil – which includes representatives of the government, the Latvian Employers' Confederation and the Free Trade Union Confederation of Latvia – social partners draft guidelines, organise information activities and examine reports on labour rights protection and labour relations.

Inspection

In Nordic countries, where working conditions and wages are regulated by sectoral collective agreements, their enforcement is the responsibility of the signatory social partners. Therefore, in these countries, trade unions and employer organisations are in charge of verifying compliance with minimum wage provisions and, in the case of breaches of the collective agreement, take action to redress the situation (Box 5).

Box 5: Social partners' inspections in Nordic countries

In **Denmark**, trade unions conduct workplace inspections and can carry out controls and checks when possible violations are reported to them. In addition, they play a crucial role in the out-of-court dispute resolution system. Trade unions representatives who receive a complaint from a worker who is or believes themselves to be underpaid must try to resolve the dispute through mandatory meetings with the employer. If an agreement is not reached at company level, the case can be brought to the attention of the relevant trade union and employer organisation. It is only if the dispute cannot be resolved through these steps that the disagreement can, upon request, be brought to the industrial relations tribunal or the labour court. As regards breaches of minimum wage provision, cases fall under the competence of the labour court, which is a body under the Ministry of Employment. The labour court is the only other institution involved in the enforcement of collective agreements besides social partners.

In **Sweden**, trade unions and employer organisation are responsible for ensuring and monitoring compliance with collective agreements. Trade unions are responsible for conducting worksite checks and inspecting documents to verify that wage levels defined in the relevant collective agreement are respected. Employer organisations do not actively conduct checks, but they provide assistance and information to their members. In cases of non-compliance, the matter is usually resolved at company level. If the problem cannot be resolved at local level, union representatives can get support from the trade union. In sectors where unionisation rates are low, workplace inspections are more frequent. Cases related to infringements of collective agreements can also be submitted to the Swedish Labour Court, although only trade unions and employer organisations can file a lawsuit. If the case is brought to the labour court by social partners, the court has exclusive jurisdiction.

In **Finland**, social partners are in charge of enforcing collective agreement – and thus also minimum wages – only for normally binding collective agreements⁴⁰. For generally binding collective agreements, the relevant enforcement institution is the regional state administrative agency. These are the authorities that carry out executive, steering and supervisory tasks of the Finnish government at regional level. They are thus responsible for monitoring compliance with contractual conditions – including wages – by non-organised employers covered by collective agreements based on the agreements being generally binding. They cannot order sanctions or other penalties if non-compliance with minimum wages is detected, and employees must refer the case to a labour court to get redress.

Source: Network of Eurofound Correspondents

Reporting violations and proposing inspections

A crucial task of social partners is related to monitoring activities: in some cases, social partners can signal violations to competent authorities and can be involved in inspection activities.

In **Czechia, France, Malta** and the **Netherlands**, trade unions can alert inspectorates or other relevant enforcement institutions if they are aware of cases of non-compliance, while in **Bulgaria** trade unions can also demand sanctions against the offender. Furthermore, in **France** and **Spain**, trade unions can be involved in the inspection process or in controls aimed at verifying compliance with labour standards and minimum wage requirements.

In some countries, social partners have special agreements in place with the labour inspectorates to regulate and formalise cooperation. This is, for instance, the case in **Czechia**, where high-level trade unions and employer organisations discuss the annual programme of inspection activities with the State Labour Inspection Office. In **Lithuania**, some representatives of trade unions and employer organisations are invited to attend annual meetings of the State Labour Inspectorate on labour issues. Finally, in the **Netherlands**, social partners have an agreement with the labour inspectorate on the exchange of useful information. Based on this agreement, social partners can inform the inspectorate if they suspect there are cases of non-compliance with some legal provisions (including minimum wage violations). In **Germany**, works councils (*Betriebsrat*) have a crucial role in enforcement activities in workplaces, having the right to check the

wages applied.⁴¹ Unlike the customs authorities, they can guarantee anonymity to complaining workers.

Assistance, support and guidance to workers and employers

Another important role of social partners is to provide employers and workers with advice, support and guidance. This function can include several activities, such as the organisation of information campaigns and events or the provision of services such as hotlines and counselling.

In **Bulgaria, Cyprus, Germany, Italy** and **Malta**, trade unions and employer organisations have organised informative events to make employees and employers aware of different issues of minimum wage and general labour regulations. In **Italy**, the *Sindacato di Strada* for the agricultural sector was created by a major trade union with the aim of providing workers with information about their rights. In **Germany**, several initiatives have been carried out: in the restaurant and catering sectors, social partners have issued leaflets providing information on possible fines for non-compliance with legal standards, on inspection routines and on documentation that could be requested by authorities. The German Trade Union Confederation (DGB) has set up a minimum wage hotline for workers to express their doubts and ask questions and has also established Fair Mobility service offices in 12 German cities, informing workers from central and eastern European countries about their labour rights in Germany. In **Greece**, a special initiative was carried out during the COVID-19 pandemic: the General Confederation of Greek Workers developed the Anti-COVID-19 Employee Information and Support Team, a task force with the

⁴⁰ Normally binding collective agreements are those that cover only the contracting parties. Generally binding collective agreements are those whose application is extended to the whole sector, including non-organised employers.

⁴¹ The Works Constitution Act grants elected members of a works council a range of rights to effectively conduct their purposed tasks. These include a right to information, a right to consultation, a right to decline and a right to co-determination. Works councils serve the employees' interests by monitoring compliance with employee protection laws and collective bargaining agreements. See the Works Constitution Act, as amended in September 2022, available at https://www.gesetze-im-internet.de/englisch_betrvg/index.html

aims of handling requests and complaints and providing information to employees.

In addition to general information provision activities, support could be of a different kind. For example, in **Austria, Poland** and **Slovenia** trade unions inform their members and help them exercise their rights, while in **Austria, Belgium** and **Latvia** trade unions give employees legal protection and help them in dealing with legal issues.

Dispute resolution

Social partners have an important role when disputes arise between employers and employees on the payment of the minimum wage. In addition to providing legal support, they can intervene to mediate between the employer and workers involved and can refer a case to court. In **Austria, Denmark** and **Finland**, trade unions try to solve the dispute between employers and employees at company level through a mediation or negotiation process. In other countries, such as **Ireland** and **Romania**, trade unions can act on behalf of their members by bringing a case to court or to the relevant enforcement body. An overview of how regulations address workers' access to dispute resolution mechanisms and the right to redress is presented in the section 'Dispute resolution mechanisms and workers' protection'.

Other stakeholders involved in enforcement

Apart from enforcement institutions and social partners, other stakeholders can be involved in the enforcement of minimum wages.

Compliance with minimum wages is strongly linked to several other issues such as undeclared work and the payment of taxes and social contributions. Accessing information and data about employment contracts and wage payments from other institutions is crucial for enforcement activities. Therefore, collaboration between enforcement institutions and other stakeholders such as the police, tax and social contribution authorities, and national statistical offices is crucial to ensure compliance and detect violations. For example, in **Greece** and **Italy** social security agencies have an important role in supporting enforcement, while in **Croatia** the Tax

Administration and the Croatian Bureau of Statistics are involved in monitoring compliance with minimum wages and data collection.

Labour courts or general courts may be involved in the enforcement of minimum wages, although in many cases labour courts are not specialised in minimum wage enforcement. Workers and/or trade unions can file a lawsuit in labour courts for violation of contractual obligations or non-payment of the minimum wage. In some countries, cases can also be brought before a court by the labour inspectorate or the relevant enforcement institutions. For example, in **Portugal**, if the employer does not comply with the law after being notified by the Authority for Working Conditions, the authority presents an infraction notice and submits the case to the Labour Court (Tribunal de Trabalho). If a violation is found, courts can order the employer to pay the due sum to the employee and, if needed, can impose fines.

In some countries, the police is also involved in the enforcement system, particularly concerning foreign workers. For example, in **Estonia**, foreign employment is registered with the police, which cooperates with the labour inspectorate and other relevant institutions.

The contributions of NGOs and national experts can also be significant. In **Malta**, NGOs assist migrant workers by providing them with information and guidance on wages and employment contracts. In **Ireland** as well, the WRC has strong informal relations with NGOs that support migrant workers and other minorities. In **Bulgaria**, NGOs and experts support the Ministry of Labour with analysis on wages and minimum wage infringements.

Cooperation arrangements and data sharing

Cooperation among different actors can occur at local, national and international levels. Cooperation arrangements can be regulated by law and formal agreements or through more informal arrangements depending on the type of activity and/or the actors involved. The degree of the involvement of these bodies and the type of cooperation in place varies from country to country, as shown in Box 6.

Box 6: Examples of cooperation between different institutions

In **Finland**, in 2016 a reform on information sharing allowed enforcement institutions to have access to information collected by other authorities.

In **Greece**, the Single Social Security Entity is in charge of monitoring compliance with social insurance and is thus indirectly involved in checking wage payments and compliance with minimum wage regulations. The entity has set up Regional Insurance Control Centres to carry out on-site and substantive inspections to combat social contribution evasion. Employers are obliged to provide all the necessary data, while inspectors may request information from employees, including wage information.

In **Italy**, the INPS oversees the payment of social contributions. In order to verify the level of social contributions to be paid by companies, Law 326 of 24 November 2003 established that, starting from the salaries for the month of January 2005, companies need to send to the INPS on a monthly basis a report (called *Uniemens*) summarising data on the wages paid to their employees and other information for calculating mandatory contributions. These declarations are the basis upon which labour inspectors ground part of their vigilance activities.

In **Croatia**, the Tax Administration of the Ministry of Finance is the body responsible for the implementation of tax regulations and regulations on the payment of social contributions. Among its activities, the Tax Administration verifies the payment of wages, taxes and contributions and can report violations to the Labour Inspectorate. The two institutions also conduct joint inspections, and – although their collaboration is not limited to or focused only on the enforcement of minimum wages – a special coordination body was created in December 2021.

In **Lithuania**, in 2019 seven public authorities (State Tax Inspectorate, Financial Crime Investigation Service, Police Department, State Border Guard Service, Customs Department, State Labour Inspectorate, and State Food and Veterinary Service) signed an agreement establishing a risk analysis centre and five joint operations centres. The decision was driven by willingness to enhance cooperation and facilitate the exchange of information. These centres, therefore, were established not specifically to enforce minimum wages but rather to address undeclared and illegal work. However, their creation makes it possible to detect, among other things, cases of underpayment and non-compliance with minimum wages.

In the **Netherlands**, the inspectorate cooperates with other institutions in the context of the National Steering Committee for Intervention Teams (*Landelijke Stuurgroep Interventieteams*, LSI). The partnership consists of the inspectorate, the Employee Insurance Schemes Implementing Body, the Social Insurance Bank, the Tax and Customs Administration's Small and Medium-Sized Enterprises Division and Benefits Agency, the Ministry of Security and Justice, the Immigration and Naturalisation Service, the police, the Public Prosecution Service and various municipalities. The cooperation is aimed at preventing and reducing tax and social security fraud, benefits fraud, labour law violations and related abuses. Interventions are project-based and may focus on a specific sector or a specific district/location.

Source: *Network of Eurofound Correspondents*

In several countries, enforcement institutions have adopted tools and agreements to facilitate data exchange. Social security institutions, tax authorities, police and finance police are the most frequently involved. In some countries there are specific data sharing mechanisms between national authorities, allowing them to access and compare data. In **Bulgaria**, the National Revenue Agency provides the General Labour Inspectorate with access to its database, while in **Spain** the labour inspectorate exchanges social security data with the Social Security Treasury. In **Czechia**, the State Labour Inspection Office provides inspection data to state administration bodies or municipal authorities, while in Slovenia and Romania national statistical offices are involved. In **Romania**, the National Institute for Statistics can provide the labour inspectorate with data related to minimum wage earners, whereas in **Slovenia** the Statistical Office provides the Ministry of Labour with data on relevant labour issues. In **Lithuania**, the State Social Insurance Fund Board (Sodra) and the State Tax Inspectorate (STI) publish a freely available database (Open Sodra) with data on wages of insured employees.

Member States cooperate at EU level, or through bilateral cooperation agreements with neighbouring countries, on the enforcement of minimum wage regulations and detection of infringements. Cooperation is more intense with regard to posted workers and in sectors with transnational relevance (e.g. international transport).

Several Member States are involved in bilateral activities and cooperation. The Network of Eurofound Correspondents reports the existence of bilateral cooperation agreements in 15 countries (see Table I-6 in Annex 2.1).

Cooperation activities may include joint inspections, as reported by **Lithuania**, **Malta** and **Spain**, and the fight against the abuse of posted or cross-border workers. In 2020, for instance, Lithuanian and Belgian inspectors carried out the first joint inspection of the same company in the two countries. In **Bulgaria**, **Estonia** and **Poland**, labour inspectorates have signed agreements with other Member States in order to exchange information and verify the application of labour legislation. In **Bulgaria**, in particular, the purpose is to monitor the enforcement of the national minimum pay rate. In **Austria**, bilateral

dialogue with neighbouring countries mainly concerns the application of the LSD-BG and the inspection of posted workers. Apart from Austria, three other countries have agreements in place specifically aimed at the inspection of posted workers: **France**, **Estonia** and **Lithuania**. In **Germany**, customs authorities have signed bilateral agreements with other European countries to fight cross-border abuse of social security benefits and illegal cross-border temporary agency work.

Among the other collaboration activities, it is important to mention the collaboration between **Ireland** and the UK Gangmasters and Labour Abuse Authority on Minimum Wage issues, related to the presence of cross-border activities between Northern Ireland and Ireland.

In addition to the above-mentioned agreements and initiatives, Member States also collaborate through international and European institutions. The Network of Eurofound Correspondents highlighted the importance of the European Labour Authority in 18 countries, and reported participation in the European Platform tackling undeclared work and its working groups in 15 countries. Furthermore, experts from 12 countries recognised the role of the Senior Labour Inspectors' Committee, while only five (Belgium, Czechia, Italy, Slovakia, Slovenia) mentioned the work of the International Market Information System. In addition, for only four countries (Latvia, Poland, Portugal, Slovenia) have correspondents pointed out relevant cooperation activities carried out by the ILO.

The importance of international cooperation activities seems to have increased in the last decade, as reported by the Network of Eurofound Correspondents in 15 countries, while in only 5 countries (Bulgaria, Cyprus, Czechia, Hungary, Lithuania) have there been no major changes.

Dispute resolution mechanisms and workers' protection

A comparative overview of how regulations address workers' access to dispute resolution mechanisms and their right to redress is presented in Table I-1 in Annex 2.1.

Usually it is workers who have to signal infringement to the inspectorates, labour dispute committees or other competent authorities, and extrajudicial dispute resolution procedures are prevalent.

Workers can report a violation by themselves, although, as reported in the section 'Role of social partners', often there is mediation by trade unions or other institutions. For example, in **Malta**, employees may file a complaint with the Department for Industrial and Employment Relations. Once a claim is raised, an inspector is assigned to the case. The main aim of the department is to act as a mediator between the employee and the employer. If an agreement is not reached, cases proceed to the criminal court, which holds a monthly hearing for cases submitted by the Department of Industrial and Employment Relations. In cases involving unionised workers, unions are encouraged to discuss the matter with the employer, and only if an agreement is not reached does the Department for

Industrial and Employment Relations step in as a mediator. In **Austria**, disputes are addressed mainly through an out-of-court resolution mechanism with the mediation of the Chamber of Labour or of trade unions, and, if the settlement out of court is not successful, workers can file a lawsuit. In **Sweden**, the primary dispute resolution mechanism is between the trade union and the employer or the employer organisation. If no agreement is reached, the social partners can bring their case to the labour court. Non-unionised workers, in contrast, cannot themselves bring a case to the labour court, but they can file a complaint to a common court. In **Ireland**, Act No. 2/1991 Coll. on Collective Bargaining states that the settlement of collective disputes on obligations under a collective agreement cannot give rise to individual claims, while collective disputes can be solved with the intervention of a mediator, arbitration or a strike.

Workers can apply directly to courts against violation of employment agreements; however, legal dispute resolution procedures are not common in matters related to compliance with minimum wages, as stated by country experts in **Hungary** and **Poland**, because trials tend to be long. In some countries, such as France and Italy, recent reforms went in the direction of reducing the use of labour courts by employees: in **France**, several reforms in the last decade have led employees to stop using the labour courts, in particular by reinforcing the formal requirements for accessing the labour courts; in **Italy** in order to reduce the high litigation rate and excessive recourse to labour courts, reforms of proceedings under labour law have introduced fees and shorter deadlines for accessing justice. This has made it more difficult for workers to access the judiciary directly in a context in which other enforcement mechanisms are not always deemed effective. In **Finland**, differences exist between normally binding collective agreements and generally binding agreements. In the first case (normally binding collective agreements), the Collective Agreements Act does not regulate dispute resolution mechanisms in detail. However, employees can report violations to the local union representative, who contacts the employer and tries to resolve the matter. If the case is not resolved, the employer or the local representative can request the mediation of the trade union. The trade union can discuss the issue with the employer or, if an agreement is not reached, with the relevant employer organisation. Only if no agreement is reached can the dispute be taken to the Labour Court of Finland. In the second case (generally binding collective agreements), there is no dispute resolution mechanism. If non-compliance is found by labour inspectors, the employee must take the matter to a court in order to obtain redress. Reports by labour inspectorates are, however, not legally binding and are not sufficient evidence for the employee to demand compensation.

Differences in dispute resolution mechanisms also relate to the ways in which regulations protect workers against adverse treatment resulting from lodging a complaint.

Workers can be protected by law, prohibiting dismissal in cases of disputes about minimum wage violations. For example, in **Lithuania**, protection of employees (present or former) or other persons who disclose information

about illegal activities of the employer and/or other persons subordinate and accountable to the employer is regulated by the Law on the Protection of Whistleblowers of the Republic of Lithuania and by the Labour Code. In **Ireland**, it is prohibited to victimise employees making a claim, and in such cases dismissals are considered unfair although, according to interviewed stakeholders, protections are relatively weak. In **Croatia**, workers' rights are regulated by Articles 133 to 139 of the Labour Act. Furthermore, the filing of a complaint or lawsuit, or participation in proceedings against an employer for violation of law, or other regulation, contract or rulebook, does not constitute a justifiable reason for termination of the employment contract (Article 117(2)). In **Cyprus**, the law forbids any adverse treatment as a consequence of a worker lodging a complaint, filing a grievance or taking a case to court for a violation of labour rights.

A collective appeal by the trade unions or other social partners may be adopted to avoid individual exposure, as in **Belgium**; or employees and their representatives may have the right to submit a complaint, as in **Latvia**. In **Sweden**, in cases of discrimination, the Discrimination Ombudsman can raise issues in the labour court, while the Law on Employment Protection 1982:80 (SV. Lag (1982:80) *om anställningsskydd*) grants the worker protection from being fired without reasonable cause.

Anonymity and information protection are another way to protect workers from adverse treatment when lodging a complaint. In **Czechia**, employees can file a complaint to the trade union or to the regional office of the State Labour Inspection Office, which is obliged to protect the identity and the personal data of the employee; similarly in **Greece**, the SEPE keeps the information it receives and sources of the complaints confidential. In Germany and Portugal, workers can also file a complaint

anonymously with competent customs authorities. In **Germany**, anonymity is also guaranteed in complaints to works councillors; however, anonymity is not guaranteed once a case is brought to court, as evidence, including the complainant's name, must be provided to the court. In **Hungary**, the anonymity of witnesses must be guaranteed during the proceedings, as provided for in Act CXXXV of 2020 on Services and Support for Employment and on the Supervision of Employment.

In cases of discrimination or adverse treatment after filing a complaint to a territorial branch of the labour inspectorate in **Romania**, workers can lodge another complaint to the National Council for Fighting Discrimination.

However, in most cases workers are poorly protected against adverse treatment resulting from a complaint, particularly in the case of non-unionised and/or foreign workers. In **Finland**, employers are prohibited from taking countermeasures. However, as workers subject to the most severe violations are often non-unionised foreign workers, it can be difficult for them to respond to adverse treatment. In **France**, until 2018 the Court of Cassation placed the burden of proof on the employer; however, in 2018 it reversed its position and ruled that, when the facts cited in the letter of dismissal constitute real and serious grounds for dismissal, it is up to the employee to show that the termination of their employment contract constitutes a retaliatory measure. In **Malta**, the Department for Industrial and Employment Relations cannot protect workers who file a complaint against adverse treatment.

In **Bulgaria**, there is no legislative text or specific mechanism to protect workers against adverse treatment resulting from lodging complaints.

3 Enforcement approaches and measures

Enforcement measures can be grouped into two main types, although some measures, such as digital tools for the calculation and record keeping of wages and working hours, and the provision of information to workers on their rights to take actions, can be considered both deterrence and preventive tools, as transparency in enforcement activities is key to enhancing deterrence (Weil, 2010).

Detection and deterrence measures are based on monitoring, inspections and sanctions.

- Monitoring activities include follow-up of previous offenders; use of blacklists; use of data matching and sharing; use of peer-to-peer surveillance (e.g. hotlines, contact points); use of supply chain responsibility; and use of digital tools for calculation and record keeping of wages and working hours.
- Inspections include routine inspections; inspections targeted at specific sectors/territorial areas with higher risks of non-compliance; requested inspections; spot checks.

Preventive measures include the following.

- Information and awareness-raising campaigns target workers, employers and citizens, to prevent non-compliance by improving information on applicable minimum wages and promoting persuasive arguments and a supportive public discourse for the development of a culture of compliance among employers and all citizens.
- Incentives to employers and workers, to promote and support compliance, make it easier and more convenient. Incentives may involve different types of measures: ensuring that only organisations complying with minimum wage regulations have access to public procurement and concession contracts; introducing

tax rebates and vouchers for compliant employers; simplifying the administrative burden and the reporting tools and procedures for compliance; and compliance award schemes.

- Provision of advisory, guidance and facilitation services and tools to employers and workers can include digital tools for the calculation and registration of wages (such as wage calculators) and working hours, supporting record keeping and compliance.

This chapter presents the main features of the strategies/approaches adopted to enforce and verify compliance with minimum wages and their recent developments, with attention to the balance between deterrence and supporting/preventive measures, and to differences between countries.

Deterrence measures

To ensure effective deterrence of non-compliance with minimum wages, a system of inspections and sanctions is needed, which requires a sufficient number of trained inspectors, with adequate material resources and sufficient power to be able to perform their duties, as well as effective procedures for the application of penalties in the event of violations. Moreover, affected workers should have access to rapid procedures against any risk of victimisation for having asserted their rights (ILO, 2014).

The analysis of national reports allows for a classification of Member States according to the prevalent type of deterrence measures adopted. As shown in Table 9, deterrence measures include, above all, inspections – either routine inspections or targeted inspections following a risk analysis or a complaint – and the use of sanctions to punish non-compliant employers.

Table 9: Deterrence measures implemented by Member State

Type of deterrence measure	Member States implementing the type of deterrence
Routine inspections	24 countries: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FR, HR, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SE, SI
Spot checks	25 countries: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FR, HR, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK
Inspections by request	26 countries: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI
Targeted inspections (specific sectors/areas)	24 countries: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LV, MT, NL, PL, PT, SE, SI
Follow-up of previous offenders	21 countries: AT, BE, BG, CY, CZ, DE, EE, EL, ES, FI, FR, HR, LU, LV, MT, NL, PL, PT, RO, SE, SI
Use of data matching and sharing information with other authorities	20 countries: AT, BE, BG, CY, CZ, DE, EE, EL, ES, FI, HR, IE, IT, LT, LV, MT, NL, PL, PT, SI
Use of peer-to-peer surveillance	16 countries: BE, BG, CY, CZ, DE, DK, EE, EL, FI, IE, LT, LV, MT, NL, SE, SI

Type of deterrence measure	Member States implementing the type of deterrence
Use of supply chain responsibility	12 countries: AT, BE, DE, DK, EL, FI, FR, HR, LV, MT, NL, SE
Use of sanctions	24 countries: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FR, HR, HU, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK
Use of naming and shaming, and blacklists	5 countries: AT, IE, MT, NL, PT

Source: Network of Eurofound Correspondents

In almost all countries, routine inspections aim to verify compliance with all dimensions of labour regulations, including minimum wages, although without a specific focus on this issue. A more focused approach may instead be adopted in targeted inspections and inspections by request, especially if they follow a complaint regarding the payment of minimum wages.

Inspections and sanctions are present in all Member States, although in different ways. Routine inspections are used in every country except in Finland and Lithuania, where other enforcement institutions carry out inspections by request and targeted inspections, and Slovakia, which only uses spot checks. Spot checks, targeted inspections (for specific sectors, areas or type of workers) and inspections by request are also quite widespread.

Measures to follow up previous offenders are implemented in almost all countries, showing that enforcement institutions pay attention to verifying that employers who have committed violations have redressed the situation and do not reiterate their behaviour.

Data matching and sharing among different institutions are also implemented in most countries to monitor compliance and detect violations.

Peer-to-peer surveillance systems are quite common, as they are used in more than half of the Member States, as are supply chain responsibility mechanisms, adopted in almost half.

Less used, on the other hand, are blacklists and name and shame measures to inform citizens about non-compliant employers, used only in five EU countries.

Box 7 reports some examples of deterrence measures indicated as good practices by the national correspondents.

In 11 countries (Belgium, Bulgaria, Estonia, Finland, Germany, Greece, Ireland, Italy, Lithuania, the Netherlands, Poland), national experts have reported that labour inspectorates or other enforcement institutions base their enforcement activities on a risk analysis and/or programme their annual activities to prioritise sectors with higher rates of non-compliance. Box 8 reports examples of sectoral deterrence measure indicated by the Network of Eurofound Correspondents.

Box 7: Examples of good practices in deterrence

In **Belgium**, digitalisation and transparency are used to partially compensate for staff shortages in inspectorates. The social security administration uses digital registration of working days (Dimona (Déclaration IMMédiate/ONmiddellijke Aangifte) for Belgian workers and Limosa (Landenoverschrijdend Informatiesysteem Migratie Onderzoek Sociaal Administratief) for foreign workers) to facilitate checks on compliance with labour regulations and employment contracts. Moreover, the Federal Public Service – Employment, Labour and Social Dialogue has developed a website that provides information about minimum wages, which previously was only available through social bureaus for employers and through trade unions for workers. These systems contribute to pay transparency and to information on workers' rights and employers' duties.

In **Estonia**, since 2014, employers are required to provide information about their employees (contract, workplace, workload, etc.) in the Employment Register. This system is part of the Register of Taxable Persons, which includes data about paid taxes and enables authorities to detect the actual wages paid to employees. Based on those databases, the Tax and Customs Board carries out tax risk analyses, evaluating in which sectors the wages seem to be too low or, given the domain of the company, the number of employees and/or their workload for which employer wages seem to be too low. The labour inspectorate has access to this database. The implementation of the Employment Register has helped identify 20,000 undeclared workers.

In **Cyprus**, the Department of Labour Relations organises an annual schedule of inspections, dedicating a month every year to a campaign specifically targeting minimum wage violations. Every year, for a month, random labour inspections (i.e. not following a complaint) are focused on checking the respect of minimum wage provisions. During this month, the department targets companies that are more likely to violate minimum wage regulations. Stakeholders state that this method has led to more successful inspections.

Source: Network of Eurofound Correspondents

Box 8: Examples of sectoral deterrence measures

In **Finland**, although the social partners have the main responsibility for the enforcement of normally binding collective agreements, monitoring is mostly reactive, as non-compliance is assessed when employers and employees contact their respective organisations and report violations. The construction sector is the only sector where the relevant trade union (Finnish Construction Workers' Union) has a more active role. Based on an agreement between the Finnish Construction Workers' Union and the sector-level employer organisation, trade unions can carry out regular inspections at construction sites and check both issues relating to health and safety conditions and issues relating to employment contracts, including minimum wages.

In **Hungary**, the Glass Gate system introduced at the beginning of 2022 requires companies who participate in public procurement procedures to register the data of every employer and subcontractor whose employees enters a construction site. Data registered by the employer are then matched with data from the tax authority. The system is primarily aimed at combating undeclared work, but it is also effective in monitoring compliance with minimum wage regulations. The system was jointly developed by the National Federation of Hungarian Building Contractors and the State Secretariat for Taxation. The system is also supported by trade unions.

In **Sweden**, an electronic badge (ID06) is used on large construction sites to monitor working conditions and combat undeclared work and collective agreement violations. The card needs to be scanned when the worker enters the construction site in order to verify the identity of the worker and their employment relation with the company or the subcontracting company, and to check whether the employer is fulfilling its legal obligations.

Source: Network of Eurofound Correspondents

As regards the number of inspections carried out and violations detected, data are very scarce at national level due to the lack of specific data collection systems. Besides the ILO data on inspections presented in the section 'Role and resources of labour inspectorates and other public enforcement institutions', some additional information collected by the Network of Eurofound Correspondents is shown in Table I-8 in Annex 2.1. Data on inspections are, in many cases, aggregated, and separate information on routine inspections, targeted inspections and inspections by request is not available. Similarly, data on violations detected by inspectors are not always collected according to the specific regulation infringed. Instead, they are often aggregated based on wider categories, so that non-compliance with minimum wages often falls under the broader category of 'underpayment' or 'violations related to wages'.

Preventive/persuasion measures

As mentioned above, persuasion measures are aimed at preventing violations by informing both employers and

employees about their rights and obligations, by raising awareness of the costs of non-compliance and the benefits of compliance, and by providing incentives to compliant companies.

Data and information provided by national correspondents, shown in Table 10, indicate that in 2021 the most common preventive measure in the EU27, implemented by most Member States, was the provision of guidance, counselling and advice to workers and employers by enforcement institutions and/or the social partners. These activities can be implemented in several ways, for instance through the provision of free digital tools to facilitate record keeping for companies, or wage calculators for workers, but also through the creation of dedicated phone lines and email boxes to collect complaints and to support compliance among workers and employers. For instance, in **Germany**, the Federal Ministry of Labour and Social Affairs (BMAS) and the DGB run a minimum wage hotline to provide support to workers and employers.

Table 10: Preventive measures implemented by Member State

Type of preventive measure	Member States implementing the type
Provision of advice/counselling/training to workers, employers, social partners	22 countries: AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, HU, IE, LU, LV, MT, NL, PL, PT, SE, SI, SK
Awareness raising and information	20 countries: AT, BE, CY, CZ, DE, EE, EL, ES, FI, HU, IE, IT, LT, LU, LV, MT, NL, PT, SE, SI
Incentives and awards for compliant firms in terms of access to public procurement, tax incentives/rebates, awards	11 countries: DE, EE, HU, IT, LT, LU, LV, MT, PT, SE, SK
Reduction of administrative burden/simplification of procedures	7 countries: BE, EE, EL, LV, MT, NL, SE
Other support measures	4 countries: DE, ES, EE, EL

Source: Network of Eurofound Correspondents

Awareness-raising and information campaigns are also widespread, with open days or workshops, social media campaigns and awareness-raising initiatives. In **Ireland**, for example, the WRC has put considerable effort into developing its call centre facilities and services to make accessing information easier for all parties. Ireland has also made effort to make minimum wage information more accessible to workers who tend to be more vulnerable to exploitation, such as young people and migrants, through the use of different communication channels (e.g. online and social media) and the provision of information in multiple languages. In addition, work permits for migrant workers are accompanied by documentation about rights and entitlements on minimum wages and general employment rights. An interesting example dealing with domestic work in **Spain** is presented in Box 9.

Incentives for compliant firms in terms of public procurement opportunities, financial incentives/rebates and awards are also used to stimulate compliance, but

only in some countries, confirming the findings of a 2017 survey carried out by the European Platform tackling undeclared work (Williams, 2019).

Measures to simplify administrative procedures and reduce administrative burdens, for instance through digital tools and instruments to facilitate record keeping and prevent unintentional violations due to complicated administrative procedures, have been adopted by some countries. An example is the Ergani information system implemented in **Greece** (see Box 9).

Reregulation also represents an important form of prevention. Regulatory interventions in the German meat industry (see Box 9) and the limitation of subcontracting to three levels in the Spanish construction sector are considered important preventive measures by experts.

Box 9 presents examples of good practice in preventive measures reported by the Network of Eurofound Correspondents.

Box 9: Examples of good practice in preventive measures

In **Austria**, in the construction sector a digital system was developed by a private company called ISHAP Personaldokumentations GmbH to allow authorities and employers to have digital access to documentation, thus facilitating the detection of violations and reducing the risk of involuntary non-compliance. The ISHAP software provides employers with information on the documents they need to submit in order to comply with legislation, while at the same time it allows authorities to see if and when an employer has submitted all the required documents. Collected documents are accessible for checks and audits.

In **Germany**, starting in January 2021, the government prohibited the use of subcontractors and temporary agencies in core activities of the meat processing industry, with the goal of increasing inspections of working conditions and compliance. The new rules also aim to increase monitoring and the obligation for employers to verify working times electronically.

In **Spain**, in 2015 the Labour and Social Security Inspectorate introduced the Fraud Mailbox or Inspección de Trabajo y Seguridad Social (ITSS) Mailbox, an online platform created to allow individuals to anonymously report violations of labour laws. Complaints can be filed by submitting an online form and specifying the type of violation and the name of the employer that has committed or is suspected of committing a violation. The system has proved to be a useful mechanism to detect frauds and has helped the inspectorate to identify companies infringing labour market regulations. The Strategic Plan for the Labour Inspectorate 2021–2023 includes a specific action related to the improvement of the Fraud Mailbox. The plan foresees the introduction of artificial intelligence techniques that would allow it to more effectively process the information received and use it to plan inspection activities. In addition, in 2021 the Labour and Social Security Inspectorate launched a campaign to increase compliance with minimum wage regulations among domestic workers. The inspectorate has sent 45,000 letters to households that employ domestic workers and are suspected of non-compliance with wage regulations. Households that receive the letter are required to proceed with rectifying their domestic workers' wages that are below the minimum wage. Employers are provided with information about how to redress the situation, including through a dedicated page on the inspectorate website. Sanctions are not imposed nor threatened, as the goal of the campaign is to promote compliance through information.

In **Greece**, the Ergani system was introduced to combat undeclared work and non-compliance with labour legislation, reduce bureaucratic and administrative burdens, increase transparency, and monitor the labour market. The Ergani information system is a tool of the Ministry of Labour for the recording and collection of statistical data on the labour market, and has operated since 1 March 2013. It records all the basic actions of employment relations (recruitment, dismissal, voluntary resignation, type of employment contract, leave, overtime work, collective agreements, etc.) and makes compliance with labour legislation more effective. Both employers and employees can access the system.

In **Lithuania**, in 2016 Sodra launched the Cherry Envelope campaign to tackle the widespread problem of non-compliance with minimum wages and undeclared work. Sodra sent personal notifications to about 140,000 salaried employees who did not accumulate one year of pensionable service in 2016, to raise awareness of the impact of low official earnings on pension contributions. The aim of the campaign is to allow people to assess their real situation, talk to their employer about the level of their salary or seek help from institutions fighting against the shadow economy and underpayment. In four months, the wages of envelope recipients increased by 55% and Sodra collected €17 million more in social security contributions from them.

In **Portugal**, some forms of compensation and incentives for employers were introduced as a result of claims by the employers' confederation at tripartite level. In 2014 and 2016, a reduction in the contribution rate payable by the employer to social security was introduced for workers covered by the minimum wage increase. In 2021 a one-off cash allowance corresponding to a fixed amount per year, per worker who earns the minimum wage, was introduced.

In **Slovakia**, in 2020 the National Labour Inspectorate launched the programme 'Responsible Employer'. Participation in the programme is voluntary. The steering committee of the programme verifies compliance with the programme requirements through the examination of documents submitted by the employer, the results of inspections, and the opinions of the competent authorities and partners. On the basis of the above documentation, the Steering Committee decides on the issuance of the Responsible Employer certificate. The registered employers have to undergo an annual review; they can request consultations, free advice and a preventive inspection from the local branch of the labour inspectorate.

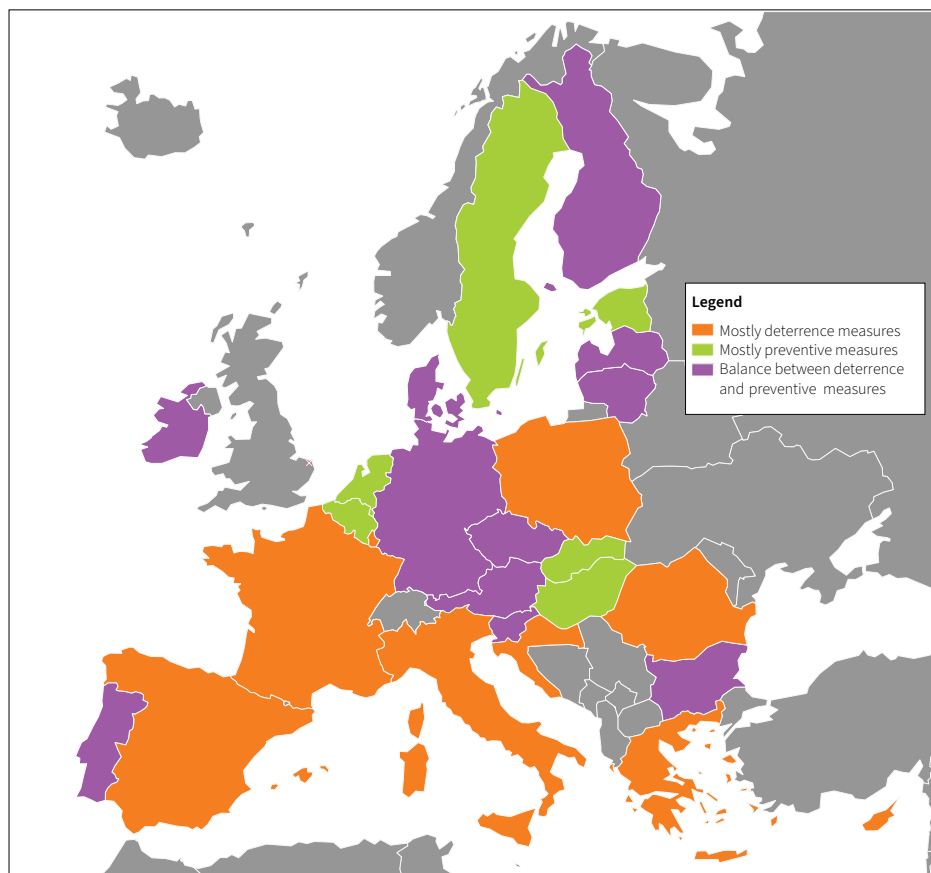
Source: Network of Eurofound Correspondents

Balance between deterrence and supporting/preventive measures

Countries differ in the balance between the deterrence and preventive/persuasive measures they adopt to enforce and promote compliance with minimum wages.

Figure 3 maps EU countries according to the prevalent type of measures adopted to enforce compliance with minimum wages, according to the national stakeholders interviewed by the Network of Eurofound Correspondents.

Figure 3: Balance between deterrence and supporting/preventive measures to enforce and promote minimum wage compliance, EU27



Source: Network of Eurofound Correspondents

In nine countries, the strategies adopted to enforce minimum wages are based mostly or only on deterrence measures. For example, in **France**, according to the stakeholders interviewed, the obligation to pay minimum wages is well known among employers and there is no need to launch a promotion or support initiative. In **Croatia**, the labour inspectorate has focused almost exclusively on deterrence of those violations considered more serious and severe than minimum wage violations, such as undeclared work, employment of foreign workers without permission and the non-payment of wages. It is only recently that the inspectorate has started to pay attention to less severe breaches of labour laws, including those related to minimum wages, but no preventive measure has been implemented yet. Similarly, in **Romania**, preventive measures have not been implemented and the approach adopted by enforcement institutions is solely a deterrent one.

In six countries, enforcement strategies follow predominantly a persuasion approach, with extensive use of preventive measures. For example, in **Belgium**, wage setting is mostly consensual at sectoral level, and the fact that in the National Labour Council both social partners agree on the minimum wage level almost guarantees its acceptance. However, controls are carried out and campaigns are set up by the inspectorates. In **Finland**, the enforcement system is mostly based on reacting to workers' notifications and assisting employers and workers in interpreting collective agreements. In **Estonia**, preventive measures are becoming increasingly important and are currently preferred by enforcement institutions.

The remaining Member States are reported as having a balanced approach combining deterrence and supporting/preventive measures in the enforcement strategies adopted (see Box 10 for examples).

Box 10: Examples of good practice with a balanced approach

In **Denmark**, the government established the State Control Unit for Labour Clauses (Statens Kontrolenhed for Arbejdsklausuler) in 2020, with the aim of checking whether private suppliers and subcontractors that perform work for the state comply with the clauses on wages and working conditions. This authority performs random inspections and document checks, focusing lately on workplaces with high numbers of posted workers, workplaces with long supply chains and workplaces with high probabilities of hiring unskilled employees. Similarly, since 2018 Copenhagen Municipality has had an Internal Response Team against Social Dumping, which makes unannounced visits to workplaces and ensures that their suppliers and partners comply with requirements and that there are fair wages and working conditions.

In **Lithuania**, Sodra and the STI have for several years been applying a systematic model of preventive and control measures called Warned to Choose. Criteria used by the authorities to assess the risk profile of companies and to impose enforcement measures include (i) gross wages paid to companies' employees below the median of the sector and/or municipality and (ii) a significant proportion of company's employees receiving less than the statutory minimum wage, that is, working on a part-time basis. The managers of the selected most risky companies are sent warning letters and invited to the STI for interviews. Managers failing to justify why the officially paid wages are below the minimum wage, and not revising the situation, receive a visit from STI inspectors. Finally, Open Sodra is a freely accessible database containing information on wages paid by all companies in Lithuania. This tool gives everyone the opportunity to see the wages and compare them with those paid by other employers in the same economic sector or in the same geographical area. This system, on the one hand, allows people to have a better understanding of the wages paid in other companies; on the other, it could be used to draw the authorities' attention to employers that do not pay their employees the correct wage, including the ones not paying at least the minimum wage.

4 Stakeholders' assessment of national enforcement systems and challenges

This chapter presents the assessment of enforcement systems reported by the Network of Eurofound Correspondents on the basis of interviews with national stakeholders, and of data and information collected. National stakeholders' perceptions of the effectiveness of the enforcement systems were collected in relation to the following three dimensions:

- the legal framework, mandate and coordination of enforcement institutions
- the role of the social partners
- enforcement strategies and EU cooperation measures

Assessment of the legal framework, organisation and coordination of enforcement institutions

On average, national stakeholders provide a rather positive assessment of the legal framework, and, to a lesser extent,

the organisation and coordination among enforcement institutions (Table 11).

The legal framework is considered very effective by stakeholders interviewed in 11 countries, quite effective/effective in 4 and only partially effective in 10. In Denmark, there is no legal framework for enforcement, as enforcement is guaranteed by the social partners.

Similarly, the organisation and coordination among enforcement institutions are considered very effective in nine countries, effective in Bulgaria and Poland, and partially effective in another nine countries. No assessment of coordination is provided for Cyprus, France, Latvia, Malta and Romania, as there is only one enforcement institution in these countries.

The assessment of the set of enforcement institutions and their mandate is, in contrast, on average quite negative. In 17 countries, enforcement institutions are considered only partially effective, while in only 8 countries are they considered very effective.

The main perceived challenges are the broad issues reported in Table 12.

Table 11: Effectiveness of the enforcement system according to Network of Eurofound Correspondents reports

Aspect	Very effective	Quite effective	Effective	Partially effective	Information not available
Legal framework	BE, CY, ES, FR, HR, HU, IE, LT, LU, LV, NL	AT	BG, PT, RO	CZ, DE, EE, EL, FI, IT, MT, PL, SI, SK	DK,* SE
Enforcement institutions and mandate	CY, DK, HR, HU, LU, LV, NL, SE	AT	BG	BE, CZ, DE, EE, EL, ES, FI, FR, IE, IT, LT, MT, PL, PT, RO, SI, SK	
Coordination and organisation among institutions	AT, BE, CZ, DK, ES, IE, LT, LU, SE		BG, PL	EE, EL, FI, HR, IT, NL, PT, SI, SK	CY,** DE, FR,** HU, LV,** MT,** RO**

Notes: * No legal framework for enforcement, as enforcement guaranteed by social partners. ** No coordination, as there is only one enforcement institution.

Source: National experts' reports

Table 12: Main challenges concerning enforcement systems according to Network of Eurofound Correspondents reports

Main challenges	Country
Complexity of the regulation and minimum wage setting	AT, BG, FI, IT, NL, PL, SI
Degree of union density	CY, DK, RO, SE
Labour market deregulation and diffusion of new forms of work	BE, CY, DK, EL, ES, FR, HR, PL, SE, SI
Irregular or undeclared work	EE, EL, HU, IT, MT
Inadequate working time accounting	EE, ES, HU, LT
Migrant workers and posted workers	IE, IT, MT, SE, SI
Lack of adequate financial or human resources in labour inspectorates	BE, DE, EL, IE, IT, LV, PL, PT, RO, SK
Mandate and activities of labour inspectorates	IE, SK
Exclusive focus on inspections for deterrence	IT, IE, CZ
Issues related to information sharing and awareness	FI, IE, PT

Source: Network of Eurofound Correspondents

Considering the institutional and regulatory set-up, one issue underlined relates to the difficulties related to the complexity of minimum wage regulation and definition. This complexity may concern the application of the correct collective agreement and the correct classification of individual workers within the collective agreement's minimum wage system, as in **Italy** and **Austria**: when the interpretation of which collective agreement is to be applied is not straightforward, it can leave room for loopholes and makes it difficult not only to enforce the agreement, but even to establish the minimum wage levels to be considered. Such complexity does not help workers and employers understand how to ensure compliance with collective agreements in a transparent and simple manner. Similar issues in the calculation of wages and interpretation of regulations have also been reported with regard to statutory minimum wages, particularly in the **Netherlands** and **Slovenia**. In other cases, as in **Poland**, the difficulties are related to the internal consistency of the legal framework and gaps in it, while in **Finland** issues concern, in particular, the length and complexity of proceedings when a worker decides to bring a case to court.

The degree of union density also represents a challenge in some countries. This is particularly relevant in small and medium-sized enterprises (SMEs), where self-enforcement mechanisms through unions and/or work councils are often weaker due to lower levels of unionisation.

Labour market deregulation and the diffusion of new forms of work (e.g. platform work) represent a major challenge according to several national correspondents, and cover all aspects of labour relations, including minimum wages and their enforcement. The main issue is that, in several countries, new forms of work are still awaiting a proper regulatory framework, which leaves room for loopholes and increases the risk of non-compliance. In **Poland**, the main challenge relates to civil law contracts (i.e. contracts of mandate, *umowy zlecenia*), which are often used to give lower wages and less favourable conditions; a reform is planned in order to extend inspectorates' mandate on this issue. In **Germany**,

mini-jobs and subcontracting constitute a challenge to enforcement.

In some countries, the widespread use of irregular and undeclared work is particularly challenging for minimum wage enforcement. Irregular and undeclared work is especially widespread in some territorial areas (e.g. the south of **Italy**) or sectors (e.g. hospitality and catering in **Malta**). In Malta, the fact that the burden of proof is on the employee and not on the employer represents a problem, as payments are in cash and not documented, and court proceedings are sometimes abandoned due to lack of evidence.

Migrant workers and posted workers are more exposed to labour violations and undeclared work and, at the same time, are less likely to file a complaint. The construction sector, which employs a high number of foreign workers, is particularly at risk of non-compliance with minimum wages, but it is difficult for authorities to detect violations. In **Ireland**, although undocumented migrant workers are the most vulnerable to underpayment, the 2000 Minimum Wage Act does not apply to them.

Another major challenge for the enforcement of minimum wages is related to inadequate working time accounting, when employers declare in employment contracts and agreements that employees work part time, while they actually work longer hours and receive the rest of the payment off records. This issue has been underlined by the Estonian, Hungarian, Lithuanian and Spanish members of the Network of Eurofound Correspondents.

In addition to the regulatory setting and vulnerable groups of workers, another major challenge concerns labour inspectorates. As reported in the section 'Role and resources of labour inspectorates and other public enforcement institutions', labour inspectorates are often understaffed and lack adequate financial and human resources. The insufficient number of staff and high personnel turnover are considered problematic, especially in relation to the reasonable benchmark for the sufficient number of inspectors per workers in industrial market economies, indicated by the ILO (2006) as 1 per 10,000

workers. In some cases, as in **Germany**, understaffing is also linked to the difficulty of filling vacant positions due to the lack of candidates and to personnel moving or being moved to other divisions. Correspondents from **Romania** and **Slovakia** also underline the issue of untrained staff.

Problems also emerge in relation to labour inspectorates' mandates and how they operate. Inspections generally depend on complaints, which may result in the risk of victimisation (as in **Ireland**) if proper protection mechanisms are not put in place against adverse treatment resulting from lodging a complaint. In some cases, as in **Slovakia**, the problem is related to the difficulty in reaching labour inspectorates, and the long times that pass before one gets an answer (if any) to written complaints.

The exclusive focus on inspections for deterrence, with little use of data sharing and other forms of vigilance, is another challenge in many countries. In **Italy**, a challenge highlighted by stakeholders interviewed is related to the exclusive focus of the National Labour Inspectorate on inspections without considering other forms of vigilance activities. In **Ireland**, records and data are not always accurately gathered and there are no penalties against employers infringing minimum wage entitlements if they pay the amount retrospectively. In **Czechia**, verifying whether employers who have been found to be non-compliant proceed in accordance with legislation after an inspection is a challenge, and follow-up controls should be improved.

Finally, some challenges relate to information sharing and awareness raising. In **Finland** and **Ireland**, it is often difficult for employees to exercise their right to redress, as they lack information about their rights: raising their awareness of regulations is therefore essential. As pointed out by the member of the General Confederation of **Portuguese** Workers interviewed, 'The great challenge is to provide the inspectorate with the appropriate means to carry out inspections on the ground, as well as guaranteeing access to adequate information that may result from the interconnection between the Authority for Working Conditions databases and social security and tax databases'.

Assessment of the role of the social partners

The assessment of the role of social partners reveals common strengths and weaknesses across Member States.

The role of social partners in minimum wage enforcement depends firstly on their representativeness among workers and employers.

National stakeholders in countries with high rates of unionisation have highlighted how trade unions are crucial in informing workers of their rights and in signalling cases of suspected violations to enforcement institutions. In Nordic countries, since the enforcement system is largely based on trade unions, the main challenge is to guarantee compliance in sectors with low union density (e.g. hotels, restaurants and catering; retail; transport), in SMEs, and

among certain groups of vulnerable workers (e.g. platform workers, posted workers, foreign workers). The issue, however, is not limited to Nordic countries, as the need to improve the role of trade unions and increase the level of unionisation in certain sectors was also underlined by national correspondents and stakeholders in **Cyprus** and **Romania**.

As for employer organisations, their degree of representativeness has an impact on their ability to promote compliance and detect violations, including through the establishment of internal regulations and procedures. For example, in **Malta**, compliance with minimum wage regulations is mandatory for members of the Malta Employers Association – one of the biggest employer organisation in the country – and employers found in violation of such regulations cannot remain in the organisation. As reported by the **Estonian** correspondent, violations often occur among non-organised employers. The main issue, therefore, is that the action of social partners is limited to their members.

Social partners are often recognised as important stakeholders by enforcement institutions in several countries, where there seems to be good cooperation between them and enforcement institutions. However, some criticisms emerge. Formal cooperation mechanisms sometimes do not exist and collaboration is based on informal interactions. This is the case, for instance, in **Ireland**, **Luxembourg** and **Spain** (although, in the last of these, only at regional level). In addition, the involvement of social partners is sometimes limited to a consultative role. In **Spain**, for example, the involvement of social partners in enforcement activities (e.g. inspections, workplace visits) is not automatic, not even in cases where they report a violation.

In other countries, Eurofound correspondents have reported issues in information exchange mechanisms. In **Greece**, for instance, social partners cannot access the Ergani information system, and this hinders their ability to conduct timely evaluations of the labour market's characteristics to suggest policy interventions and plan their activities.

Assessment of enforcement strategies and EU cooperation measures

Deterrence measures are considered quite effective overall, and sanctions are deemed very dissuasive in 12 countries (see Table 13). The effectiveness of sanctions is generally related to their level: higher sanctions are considered to have a stronger dissuasive power. Indeed, the main reason why fines are not considered adequate in **Germany** and **Poland** reportedly is that they are too low and should be increased to have a greater dissuasive effect. According to the interviews and desk research conducted by the Network of Eurofound Correspondents in the EU Member States, a crucial issue with regard to the effectiveness of deterrence measures concerns the lack of adequate human and financial resources in enforcement bodies, which is considered the main reason for the partial

effectiveness of deterrence measures in **Italy, Poland and Portugal**.

In all countries where preventive measures are used, they are considered at least partially effective in promoting compliance. In 11 countries (see Table 13) they are deemed effective and in 6 countries they are considered partially effective and in need of being strengthened.

The assessment of cooperation arrangements at EU level is positive overall, and the mechanisms in place are deemed useful. Cooperation activities have significantly increased in recent years, particularly with regard to posted workers and the exchange of valuable practices and knowledge

among national institutions and labour inspectors. However, some weaknesses were reported. The first one relates to the lack of a common information exchange system, as reported by the **Austrian** correspondent. In addition, according to the **Irish** correspondent, since EU regulations do not cover minimum wages, direct cooperation on this issue is particularly difficult. Finally, correspondents in both **Bulgaria** and **Finland** underlined how cooperation may be hindered by differences in enforcement institutions and their mandates across Member States.

Table 13: Effectiveness of deterrence and preventive measures according to Network of Eurofound Correspondents reports

Measures	Effective	Partially effective	Not effective	Assessment not available
Deterrence	AT, BG, CY, DK, EL, HR, HU, IE, LT, NL, SE, SK	BE, DE, EE, ES, FI, MT, SI	IT, PL, PT	CZ, FR, LU, LV, RO
Preventive	AT, BE, CY, DK, EE, HU, IE, LT, MT, SE, SK	BG, DE, EL, NL, PT, SI		CZ, ES, FI, IT, LU, LV, PL, RO

Source: Network of Eurofound Correspondents

5 Conclusions and policy implications

The comparative analysis of enforcement systems in the EU27 reveals that minimum wage enforcement regulations and systems present common features across the EU, although differences in mandates, procedures and approaches exist. Stakeholders interviewed have also underlined some major gaps and challenges that need to be addressed in order to improve compliance with minimum wages.

In the majority of Member States, there is not a specific minimum wage enforcement system and these functions are taken up by generalist institutions in charge of labour law enforcement (i.e. labour inspectorates). These institutions rarely have departments or offices specifically dedicated to monitoring and ensuring compliance with minimum wages, and enforcement activities: these activities are dealt with alongside other labour issues (e.g. undeclared work, tax evasion and social contribution fraud) or in the wider context of verifying compliance with employment contracts. On the one hand, as reported in some of the Network of Eurofound Correspondents reports, this happens because non-compliance with minimum wages is perceived by enforcement institutions as less pressing than other issues that they have to deal with (e.g. safety and health in workplaces). On the other hand, breaches of minimum wage regulations are often connected with other violations and can be detected even if enforcement activities do not have a specific focus on this issue.

Bringing together all enforcement activities under the responsibility of a single generalist institution may allow for holistic and integrated enforcement activities, thus reducing bureaucratic and administrative burdens, avoiding duplications and guaranteeing more efficient monitoring and data collection (Velázquez, 2018). However, given the often limited financial and human resources, a wider mandate and scope for enforcement institutions implies the need to define priorities, and may result in an inadequate focus on minimum wage compliance. In addition, as underlined by Velázquez (2018), generalist institutions may lack the specialisation needed to address complex issues or specific problems. These factors therefore influence the efficiency of labour inspectorates and the effectiveness of their activities, as emerges from the comparative analysis.

In the last two decades, in many countries there have been important reforms of the enforcement systems and regulations, including structural reforms of enforcement systems, reforms of labour inspectorates, changes in the type and intensity of sanctions, reforms of information access and information sharing, and the creation of competent groups/commissions.

The ways in which labour inspectorates have been able to respond to recent trends and risks depend on

inspectorates' legal jurisdictions and human and financial resources.

According to the opinion of the stakeholders interviewed by national correspondents, human and financial resources are in many cases only partially adequate for effective enforcement activities, although Network of Eurofound Correspondents assessments show that financial allocations and human resources for labour inspectorates have increased over the last decade in many Member States for which information is available, even if at different rates across EU countries. ILO indicators show instead mixed evidence on the change in the number of inspectors, and a decline in the number of labour inspections and inspection visits per inspector in the majority of countries. These trends may relate to changes in the composition of inspection activities, with a greater role for targeted inspections based on previous data matching to detect violations, and for inspections by request. According to some experts, there is also a more general issue of few working hours and low productivity in the public sector to be considered, asking for a more thorough assessment of the adequacy of the inspectorates' financial and human resources based on reliable and complete data and indicators comparable across countries (Santos et al, 2020).

Approaches based on stronger cooperation with social partners and other institutions, risk analysis and preventive measures could compensate for the lack of resources.

Cooperation with social partners is a crucial aspect of minimum wage enforcement. As underlined by the European Platform tackling undeclared work (2021), enforcement measures can benefit from the combination of the expertise and investigative powers of enforcement institutions and the insight and outreach of social partners. However, cooperation seems to be mostly based on informal interactions, while formal involvement is limited to membership of consultative bodies or sectoral interventions. Formalising cooperation with specific agreements is therefore advisable and considered desirable by national correspondents. Greater recourse to partnership agreements with the social partners and other representative associations will also improve the capacity to reach out to those beyond the reach of conventional inspection activities – for example, workers in microenterprises and SMEs, on-call and temporary workers, platform workers and bogus self-employed workers, and migrant workers (Walters, 2016) – and help them enforce their wage rights (Benassi, 2011).

In order to enhance enforcement activities, most EU countries are paying attention to the use of data mining and risk assessments based on administrative data, and to collaboration with tax and social contribution authorities and national statistical offices. Inter-agency cooperation

should therefore be strengthened, particularly with regard to information sharing. In this respect, a crucial point that emerges from the analysis is the lack of systematic data collection and monitoring systems on the enforcement of minimum wages. Collecting information on enforcement activities related to minimum wage violations is essential not only to understand the dimension of non-compliance, but also to evaluate the effectiveness of inspections, sanctions and preventive actions. Setting up a system for monitoring enforcement activities would also allow enforcement institutions to rationalise their resources, directing funds where needed, and to better plan their activities.

Deterrence and preventive measures complement each other and should be adopted together for effective enforcement strategies.

The more traditional deterrence measures aim to detect non-compliant employers through inspections and workers' complaints. In relation to these measures, one pre-condition for effective enforcement through labour inspections is the provision of trained staff. In addition, inspectorates must be able to access enterprises, to check wage records and other documents, and to conduct interviews with workers and management. They should also be able to issue warnings or open administrative procedures so that they can impose penalties in cases of non-compliance. Adequate penalties and follow-up measures are also necessary, together with the simplification of provisions in legal/collective agreements and procedures to reduce the risks of non-compliance due to misinterpretation of rules.⁴² Workers should also be provided with adequate support to enable them to effectively exercise their rights, including the right to recover the unpaid amounts and avoid retaliation.

Prevention relates to promoting minimum wages among workers (raising their awareness of their rights and supporting them in issuing complaints) and among employers (including households employing domestic and care workers) through the provision of incentives, guidance and support, and simplification of administration and reporting. Prevention also implies stronger collaboration with social partners and other institutions to detect non-compliance and to promote and ensure compliance. Making information on statutory or negotiated wages publicly and easily available through the establishment of a helpline, the promotion of awareness campaigns, and naming and shaming measures could also increase compliance at relatively low cost (Garnero, 2018). There is growing attention to the advisory, guidance and informative role of inspectorates, as well as to the use of incentives for employers and of information and awareness-raising campaigns targeted at companies, workers and citizens in different languages to increase compliance.

At EU level, cooperation among enforcement institutions and the social partners, particularly in relation to cross-border workers, and mutual learning can be strengthened. In this respect, several members of the Network of Eurofound Correspondents highlighted the importance of the European Labour Authority, which has called for more dedicated and sustained support for cross-border collaboration between labour inspectorates and social partners. However, in order to set up common cross-border measures, the mandates of enforcement institutions and of the social partners from different countries need to be mutually acknowledged. In addition, for many underresourced national labour inspectorates and social partners, EU-funded projects can support cooperation.

⁴² Rani et al (2013) suggest that the complexity of the system may be an important cause of non-compliance; streamlining the number of collective agreements would make the system more comprehensible to both employers and workers.

Part 3:
Policy analysis for selected case
studies

Introduction

This part presents the main findings from the analysis of 21 case studies investigating the drivers and hindrance factors of non-compliance with minimum wages in order to identify which policy measures appear to be working well in which context and why. This is fundamental to understand if policy measures could be transferred to other countries and in what circumstances the policy could work elsewhere. To this end a detailed analysis of the extent to which certain mechanisms in given contextual features are producing certain outcomes is carried out.

A selection of 10 EU Member States and 5 sectors was suggested as a basis for investigation in the 21 case studies, in order to capture diversity in approaches, while being manageable in terms of the scope of the study.

A series of criteria was applied in the country selection. First of all, the 21 case studies allow for a useful – although not exhaustive – geographical representation of Europe. In the case studies, continental Europe is represented by Austria, Belgium and Germany; northern Europe by Denmark, the Netherlands and Sweden; southern Europe by Spain and Italy; and eastern Europe by Lithuania and Slovakia. In addition, case studies cover the three different approaches explored in the previous parts of this report and identified in each case: a preventive approach, a deterrence approach and a balanced approach. Each of these three approaches implies distinctive practices that characterise the strategy followed by each country for the enforcement of minimum wage regulations, with the balanced approach including both preventive and deterrence approaches. Economic sectors were also considered as a criterion for selection. Of the 21 case studies, 12 refer to national initiatives/measures covering all sectors within the same country, while the remaining 9 cover five major sectors – construction, meat processing, the platform economy (covering food delivery

and cleaning services), domestic work and agriculture – considered to be particularly relevant to the policy discourse on minimum wage compliance.

From a theoretical point of view, Part 3 uses the realist approach (see Box 1 below) in both the analysis of measures and a meta-evaluation of the available assessments of the instruments concerned.

Within this theoretical framework, the methodological techniques used in the case studies concern desk research, data analysis, and interviews concerning relevant information on the intervention, actors, mechanisms, outcomes and context. Overall, data are collected through five resources:

- desk research about specific background features of the case study countries in which the policy intervention took place
- a literature review regarding strategies through which compliance with labour legislation and, more specifically, with minimum wages, may be favoured
- meta-evaluation concerning the outcomes that the designers of each intervention have obtained through the implementation of the policy intervention, on the basis of available data and previous assessments
- a review of interviews carried out by the Network of Eurofound Correspondents concerning enforcement institutions, policies and practices dealing with minimum wages
- 62 ad hoc semi-structured interviews carried out by researchers with national authorities/social partners/experts, academics and other key stakeholders concerning the intervention, to collect primary data and information

Box 1: The realist approach

The realist approach is a specific form of theory-driven evaluation that was first developed based on the idea that studies should not only indicate whether an intervention works or not but should highlight what works, how, in which contexts, and for whom (Pawson and Tilley, 1997). Incorporating theory throughout the study, realist evaluations aim to be pragmatic by producing policy-relevant findings at a level of abstraction that can be transferred across settings (Salter and Kothari, 2014; Fletcher et al, 2016; Gilmore et al, 2019). This means spelling out how measures actually work, specifying the mechanisms of implementation and relating them to the objectives of the measures, the existing context and the expected and real outcomes. Thus, the added value of realist evaluation for policy analysis is that it provides different kinds of information for different needs: how different programmes work for different populations, which programmes are required for which populations, and which instruments can be used to understand which individuals could be targeted by appropriate programmes (Westthorp, 2014).

As a result, in line with the realist approach, the analysis has made use of CMO configurations, which describe how specific contextual factors (C) work to trigger particular mechanisms (M), and how this combination generates various outcomes (O) (Pawson and Tilley, 1997). By exploring these mechanisms of change, realist evaluations aim to understand how a programme works or is expected to work within specific contexts, and what conditions may hinder or promote successful outcomes (Pawson, 2006; Jagosh et al, 2011; Gilmore et al, 2019). Realist evaluations therefore seek to explain generative causation within the social world by identifying particular patterns of interactions through the three CMO components.

The policy analysis provided in this part follows the structure of CMO configurations as described above, with each chapter analysing each component: context, mechanisms and outcomes. Therefore, it is structured as follows.

Chapter 1 introduces each of the 21 case studies, summarising their main activities, with the aim of presenting an overview of the policy measures analysed through the analytical process of the CMO configuration, which is then discussed in detail in subsequent chapters. The next three chapters deal with each of the components of the CMO configuration: Chapter 2 presents the main contextual factors identified across the case studies;

Chapter 3 focuses on the main mechanisms identified in the case studies that allow designers of the interventions to reach the outcomes; Chapter 4 covers the direct and indirect outcomes produced and identified in the case studies. The main lessons learned through the analysis of all the different policies put in place (in terms of what worked and for whom) are provided in Chapter 5. Two [annexes](#) accompany this part of the report; they are published on the publication web page as a working paper on the ‘Eurofound papers’ tab. They break down as follows: Annex 3.1 details the main methodological and operative steps being followed within the case studies; Annex 3.2 includes all the CMO configurations as identified in the 21 case studies.

1 Overview of case studies

The application of the CMO model of realist evaluation allowed the analysis to move from the specific features of the context in which processes and mechanisms were implemented to the outcomes achieved.

Before providing detailed considerations for each of these aspects in the following chapters, this chapter provides an overview of the 21 measures considered, in alphabetical order by country, and specifying the type of approach each follows.

Austria

The ISHAP system in the construction sector: Preventive approach

The private sector initiative ISHAP was founded in 2008 with the intention of offering practice-oriented software systems to its clients and effectively identifying shortcomings in their construction companies. Through ISHAP digital tools, prime contractors and property developers obtain a classification of documents required of them when they employ posted workers. Classification of documentation takes place through the ISHAP software, a digital system that is able to map the complex chains that usually develop in the construction industry. The software functions according to a traffic light system. When all documents are available and correct, the client will be able to see online a green light next to the photo of the worker involved, together with the person's work status. When the colour is orange, it means that some information is missing or has expired, while red indicates that documents are missing, there are bogus companies or, overall, something is wrong with documentation. When the documents are ready, they are all digitally available and easy to check and audit. ISHAP's customers can obtain access solutions, such as turnstiles for their construction sites, coupled with the necessary software. Therefore, if a worker's documents are missing or have expired, this worker cannot enter through the turnstile with their pass. In addition, these access solutions can also be used to record working time, which must be kept up to date on a daily basis in the case of personnel leasing.

GPLB audits: Balanced approach

Joint audits of payroll taxes and contributions (GPLB audits) were implemented in 2003 and consist of checks on employers carried out at regular intervals by both auditors of the ÖGK and the Audit Service for Payroll Taxes and Contributions.⁴³ Together they represent social security institutions that perform audits of all employers in all sectors. There are nearly 20 auditing teams, which usually consist of 12 auditors each, headed by a team leader.

Generally, audits take place every three to, at most, five years and have as their main focus all wage-related levies to be borne by employers, meaning all social security contributions and levies, wage taxes and municipal taxes. An essential part of the examination is checking minimum wage compliance, since minimum wages determine the basis of contributions through the 'claim wage principle'.⁴⁴ In Austria, collective agreements cover almost all employees, so the basis that is checked through audits depends on the applicable collective agreements. If the minimum wage is not paid by the employer, subsequent payments may be claimed in the GPLB audit, and the employer is reported to the district administrative authority for breaching the LSD-BG. The GPLB audits also have a consulting and awareness-raising objective; there are several cases in which the incorrect/insufficient payments detected are not on purpose but rather because allowances, as regulated in collective agreements, have been applied in the wrong way. Therefore, besides their deterrence character, the joint GPLB audits follow a strong preventive approach as well. During audits, employers are informed and advised in case of misunderstandings.

BUAK in the construction sector: Balanced approach

The Construction Workers' Annual Leave and Severance Pay Fund (BUAK) is a statutory body tasked with the autonomous administration of statutory duties in the construction industry. This authority was founded in 1946 and is a paritarian institution, led by both employer and employee representatives. Over the years, BUAK has gained new responsibilities, and among its main activities are (i) social security procedures; (ii) informative and advisory services; and (iii) compliance with minimum wages for construction workers. For the purposes of this research, the second and third activities are worthy of particular attention. Concerning information and advice, BUAK provides awareness-raising initiatives for foreign and posted workers. A designated website run by the Federal Ministry of Labour and BUAK, the Posting of Workers Platform, provides information concerning regulations, procedures and requirements for posting workers in Austria.⁴⁵ The website is available in six languages besides German. Other channels of information include brochures, personal information letters, face-to-face and telephone consultations, and inspections of construction companies. Furthermore, personal letters are sent by BUAK four times a year to all construction workers, and they include information concerning payments, periods of employment, all employment contracts and personal entitlements. In cases of underpayment, the worker will receive, as well, information about the formal complaint

⁴³ The audit service is a nationwide organisational unit within the Federal Ministry of Finance. For a short time between 2018 and mid-2020, the audits were conducted by the finance ministry's audit service alone, but this was found unconstitutional.

⁴⁴ The claim wage principle (*Anspruchslohnprinzip*) is enshrined in the Austrian General Social Insurance Act and means that the calculation of social security contributions must be based on at least the remuneration (money and in kind) to which there is a legal entitlement from the employment relationship.

⁴⁵ The Posting of Workers Platform is available at https://www.entsendeplattform.at/cms/Z04/Z04_0

that has been made against the company in question based on BUAK assessments. As regards BUAK's activities to promote compliance with minimum wages, BUAK verifies compliance at construction sites, and suspected cases of wage and social dumping, and it has the power to file formal complaints with authorities in the event of non-compliance.

Belgium

Digital tools Dimona and Limosa: Deterrence approach

Dimona and Limosa are mandatory electronic declarations that employers must submit to declare the beginning and end of their workers' professional activity to the National Social Security Office (ONSS). Such declarations are mandatory for all employers in the public and private sectors. This ensures that, every time a worker is hired or leaves, an electronic notification is submitted to all social security agencies.

Dimona was first tested among employers in the construction industry in 2003 and it has been in operation since then for all sectors. Through Dimona, employers declare new Belgian employees before the starting date of their jobs, creating an electronic personnel register for each worker. Through Dimona, the Belgian government electronically identifies all employees to obtain an overview of the relationship between employer and employee and to grant social benefits to workers. The electronic notification is linked to an electronic staff registry in which employees are listed chronologically by employment start dates. Failing to comply with the Dimona declaration might lead to criminal fines ranging from €2,400 to €24,000 and an additional fine from the ONSS.

Limosa is for posted workers covering a maximum period of 12 months and, after that period, it can be renewed. Through it, employers posting foreign employees to Belgium notify the ONSS about the assignment before the worker arrives in the country. Posted workers must be able to present proof of the Limosa declaration to the social inspectorate at any moment. This declaration provides information to Belgian authorities about the identity of the foreign employer and the posted worker, the nature of the activities provided in Belgium, and their working place and schedule while in Belgium. Failure to submit the Limosa declaration exposes both Belgian and foreign employers to criminal fines, from €24,000 up to €576,000 per employee. Lastly, if the posted worker is subject to the Belgian social security system (for instance, because the requirements for remaining subject to the home country's social security system are not complied with), then the foreign employer has to proceed with the Dimona declaration.

Denmark

Hilfr in platform work/cleaning sector: Preventive approach

3F-Hilfr represents the first collective bargaining contract between UNI Global Union's⁴⁶ Danish affiliate 3F and Hilfr, a Danish platform offering house cleaning services that started in 2017. The contract aims to extend rights and protection through agreement and representation. The project started with a one-year trial agreement that came into effect in 2018. When starting their cooperation with the platform, domestic cleaners (or 'Hilfrs' in the platform's terminology) invariably have self-employed status. Under the agreement, after 100 hours of work for the platform, they automatically acquire employee status (becoming 'Super Hilfrs') unless they explicitly request to opt out. Super Hilfrs have a defined minimum salary, pension, holiday pay and sickness pay. Furthermore, both the Hilfr and the customer are covered by insurance. Since the end of the trial period, the agreement has been constantly renewed month by month. Overall, the Hilfr agreement includes some novel elements, which are rare in the Danish collective bargaining system.

- Status as a Hilfr is optional: it is up to the Hilfr worker to become a Super Hilfr.
- Unlike other employees covered by a collective agreement, Super Hilfrs can set their own hourly wages at their own discretion.
- Unlike most comparable collective agreements, which generally establish a notice period of three months, the notice period for both Super Hilfrs and the platform is two weeks within the first six months of employment as a Super Hilfr.
- Disputes about interpretations and breaches of the agreement can only be solved by arbitration. Most other collective agreements in Denmark establish that disputes about breaches can be brought before the labour court.
- A regulation on digital data is included in the agreement: digital data such as profiles and ratings can be deleted only after a certain period given by the platform. This secures both workers' and the company's rights.

State Control Unit for Labour Clauses: Balanced approach

The Danish government established the State Control Unit for Labour Clauses in 2020, with the goal of checking whether private suppliers and subcontractors that perform work for the state comply with the work clauses on wages and working conditions. This authority performs random inspections and document checks, focusing recently on workplaces with high numbers of posted workers or long supply chains and workplaces that are likely to hire unskilled employees. The control unit oversees work

⁴⁶ UNI helps workers build power by growing unions through organising, protecting and expanding collective bargaining, and holding corporations and governments accountable to workers. UNI is pushing for a shift in power from multinational corporations to the cleaners, care workers, postal employees, information technology specialists, professional athletes, printers, cashiers, security officers, bank tellers, call centre employees, screenwriters and millions of other workers it represents.

clauses in contracts where the Swedish Road Directorate, Banedanmark (the organisation responsible for the state-owned railway network), the Danish Building Authority, and the Danish Agency for Economic Affairs are parties to the agreement. Furthermore, it provides information support to employees and employers about labour regulations. Within this framework, the Control Unit acts on behalf of the Danish Agency for Economic Affairs and the individual state institutions by ensuring compliance of private suppliers and subcontractors with the work clause. The Danish Agency for Economic Affairs plays a significant role since voluntary parties are also encouraged to report detected breaches of work clauses to the Danish Agency for Economic Affairs, with the latter being responsible for enforcing framework agreements.

Besides performing inspections and document checks, controllers from the control unit provide both suppliers and employees that they are inspecting with information leaflets on their respective rights and duties, how the inspection works and some useful contacts. The leaflets are distributed in several foreign languages. Suppliers can print them out and distribute them to their subcontractors and employees. Through the leaflets, workers are aware of their rights and how the minimum wage in Denmark works. The control unit also communicates that the employer is obliged to pay the salary agreed upon in the collective agreement and that the hourly wage must not be less than the minimum wage rate related to the appropriate professional group. The control unit also receives enquiries through its website if a worker suspects that they are not receiving the correct wage or that they are experiencing unfair working conditions. This can be done anonymously.

If potential violations of the work clauses are identified, the control unit summons the relevant state institution that entered into the contract, the main supplier and any of its subcontractors for a control follow-up meeting. At the meeting, the documentation and calculations are reviewed. After it, the control unit sends the final analysis report to the relevant state institution that has entered into the contract. It is the responsibility of the individual state institution to determine which sanctions are applied to the supplier if there is a breach of the labour clause. Voluntary parties, including self-owned institutions, municipalities and regions, must monitor compliance with the work clauses and are encouraged to report detected breaches to the Danish Agency for Economic Affairs.

Internal Response Team against Social Dumping: Balanced approach

Since 2018, Copenhagen Municipality has established an Internal Response Team against Social Dumping, which performs unannounced visits to workplaces and ensures that their suppliers and partners are in order with wage

payments, as well as fair wages and working conditions. Similarly to what was noted under the State Control Unit for Labour Clauses, everyone who works on tasks for the municipality or is employed on a project that receives financial support is subject to a work clause, being guaranteed fair pay and working conditions. Therefore, Copenhagen Municipality's work clause includes chain responsibility that obliges the main supplier to ensure that all organisations, throughout the entire supply chain, offer fair pay and working conditions. Suppliers to the city of Copenhagen must have an ID card clause in their contracts, which represents all the obligations that the supplier must guarantee to employees. If the internal response team finds violations in workplaces, the first step to resolve the issue consists of a dialogue between the employer and the team to find an agreed solution. In the event of a negative outcome, a fine can be imposed and, in the worst case, the contract can be terminated.

The Internal Response Team against Social Dumping is also equipped with an anonymous hotline. If a person who has worked on an assignment or tasks for Copenhagen Municipality suspects social dumping or unfair working conditions, they can call the hotline or write to the internal response team anonymously.

Germany

SOKA-BAU in the construction sector: Balanced approach

SOKA-BAU is the umbrella brand that since 2001 has represented two paritarian social funds of the German construction industry created in 1949: the Holiday and Wage Compensation Fund of the Building Industry⁴⁷ and the Supplementary Pension Fund of the Building Industry.⁴⁸ On behalf of social partners in the construction industry, SOKA-BAU provides various services and social security procedures covering both German and foreign construction companies and workers. For it to do so, construction companies need to register with SOKA-BAU after starting their business activity. Among SOKA-BAU's main activities are (i) social security procedures; (ii) informative and advisory services; and (iii) compliance with employment standards. For the purposes of this research, the second and third activities are worthy of particular attention. As regards the former, SOKA-BAU plays an informative role. On an annual basis, SOKA-BAU provides both workers and employers with information concerning the fund schemes and employment rights. Information about SOKA-BAU and its services is also provided by email, telephone and on-site consultation. Local regional advisors, a designated portal on SOKA-BAU's official website and specific telephone lines in workers' native languages are available.⁴⁹

47 Urlaubs- und Lohnausgleichskasse der Bauwirtschaft: its holiday pay scheme applies to all German construction workers, and construction workers who have been posted to Germany.

48 Zusatzversorgungskasse des Baugewerbes AG: it operates a non-mandatory supplementary pension scheme financed by workers' or employees' contributions, and a mandatory supplementary pension scheme that is financed only by employers and applies mandatorily to all western German construction workers and employees.

49 SOKA-BAU's online portal for posting companies and posted workers is available in 14 languages at <https://www.soka-bau.de/europa>

For compliance with employment standards, SOKA-BAU requires employers to submit monthly electronic reports concerning each of their workers for it to carry out social security procedures. Such reports must provide information concerning gross wages, hours paid, number of days worked, vacation days granted, and so on. This type of information represents the basis for the entitlements given to employees and the refunds given to employers by SOKA-BAU, and through it the institution is able to guarantee compliance with minimum employment standards. Construction companies that demonstrate compliance with collectively agreed working conditions receive award certificates that may be used by companies as certified documents when tendering for public contracts. If potential anomalies are identified, SOKA-BAU is authorised to request further information from employers concerning workers' payments and employment contracts. If violations are confirmed, SOKA-BAU asks the company concerned to pay the corresponding social security contributions, without involving the state authorities. However, if the company does not comply with the demand, legal action is taken with the involvement of German customs authorities, specifically the FKS.⁵⁰

It is worth noting that SOKA-BAU is responsible only for contributions and, therefore, violations are not communicated to the affected employees because the umbrella brand has limited legal authority. SOKA-BAU requests the additional contributions from the company concerned, without specifically requiring additional wage payments to the employee. Indirectly, however, the worker becomes aware of corrections of the gross wage sum through the increase in the holiday entitlement.

Fair Mobility: Preventive approach

The DGB, in collaboration with the BMAS, launched the initiative *Faire Mobilität* (Fair Mobility) in 2011 with the intention of providing information services to foreign workers, especially from central and eastern European countries. The main objective is to improve their working conditions by offering counselling and advisory services about their labour and social rights in Germany, with a particular focus on enforcement of fair wages. To this end, at the time of writing, 11 local advisory centres (reachable by phone or email, as well as in person) had been established in different German cities. These centres provide foreign workers with information, in their native languages, and support regarding labour standards and social law. Fair Mobility's advisory centres cooperate with comparable local institutions, state-funded advice centres and trade unions, creating a nationwide network that is able to reach employees from all industries. In addition, Fair Mobility organises awareness-raising campaigns in various languages at strategic places such as factory gates, agricultural enterprises and motorway service areas, and on social media. To provide technical information on practical issues, Fair Mobility also organises conferences, workshops, modular training and other educational events to provide union workplace representatives and works

councils with useful information on how to support foreign workers at workplaces, since generally they are the first contact point in companies and agencies for questions regarding wages and working conditions.

Occupational Safety and Health Inspection Act (*Arbeitsschutzkontrollgesetz*) in the meat processing industry: Balanced approach

In December 2020 a new legislative initiative became law, the Occupational Safety and Health Inspection Act. This body of legislation provides a set of new regulations aimed at establishing safe working conditions in the meat industry by amending existing legislation. The new act establishes new rules for companies and employees in other sectors as well, but the main focus is on the meat industry. Among the main measures introduced by the act, specific measures were identified as crucial for compliance with minimum wages.

Ban on contracts of service and on temporary agency work:

Only regularly employed workers in meat companies are allowed to engage in the core areas of the meat industry (slaughtering, cutting and deboning, and meat processing). With this intent, a ban on service contracts and on temporary agency work has been introduced. This provision makes an exception for companies with fewer than 50 employees. A transitional period of three years is granted for employers, who are allowed to use temporary agency work during that time if the agency staff are regulated by a collective agreement and are working in meat processing, not in slaughtering, cutting and deboning. Furthermore, agency employees may only account for a maximum of 8% of a workplace's employment, and their assignment should have a maximum length of four months. The same payment conditions must be granted for agency and core staff.

Requirement to electronically record employees' working hours:

In order to verify minimum wage compliance, employers must electronically record employees' working hours, guaranteeing tamper-proofing. Rest periods and changing and washing-up time must be counted as paid working hours.

Financial penalties: Financial penalties for breaches of the Working Time Act were updated, increasing the maximum amount from the previous €15,000 to €30,000.

Minimum inspection ratios: Company inspections are increased, introducing an annual minimum inspection ratio of 5% of workplaces in the meat industry in each federal state. Authorities may prioritise inspections of companies considered potentially non-compliant with working conditions.

Exchange of data: To improve cooperation among German authorities and to improve inspections, the act makes it possible to exchange data, and information about verification of documents, between the occupational safety authorities of the federal states and the accident insurance institutions while they are making company inspections.

⁵⁰ The Finanzkontrolle Schwarzarbeit is the department of the German Central Customs Authority that is in charge of dealing with detecting undeclared work and unlawful employment.

Italy

National Collective Bargaining Agreements Unique Identification Code (*Codice Unico dei contratti*): Preventive approach

The National Collective Bargaining Agreements Identification Code (*Codice Unico dei contratti*) has been set up by an agreement with the INPS and the Ministry of Labour and Social Policy. The creation (and application) of this code was supported by Law 120/2020 (the ‘Simplification Decree’) but became effective in January 2022. The system represents one of the most important efforts to create a unique identification code for collective agreements in order to build a unique database of collective agreements to improve transparency. It starts from the legal basis that all collective contracts signed must be deposited with the National Council of Economy and Labour, which assigns an alphanumeric code that uniquely identifies that collective agreement. The national collective agreement applied, identified by means of a single alphanumeric code for the whole public administration, has to be indicated in all the mandatory communications. Hence, any firm hiring a worker must indicate the alphanumeric code that uniquely identifies the collective agreement that applies to the worker. This makes sure that the agreement applicable to each professional position in each type of institutional communication is no longer specified using a disorganised set of multiple coding systems, but rather by means of a single database, making it easier for public administrations to trace the collective agreement by which the employer is bound and, therefore, to identify potential irregularities.

Trade unions’ and local authorities’ cooperation agreements in the platform work/food delivery sector: Preventive approach

Digital platform workers’ rights in the areas of occupational safety and health, working hours and compensation are not clearly established under existing labour laws in most EU countries. In Italy, there have been some first attempts to do so. The Charter of Fundamental Rights of Digital Labour in the Urban Context is the first agreement of its kind. The initiative was launched in 2018 by the Municipality of Bologna, in northern Italy, aiming to protect food delivery workers. The charter resulted from negotiations between Riders Union Bologna; the Italian trade union confederations the Italian General Confederation of Labour (CGIL), the Italian Confederation of Trades Unions and the Italian Labour Union; the Municipality of Bologna; and the platforms Mymenu, Sgnam, Domino’s Pizza and Winelivery. The charter covers general provisions, the right to be informed, the right to protection (fair wages, health and safety, protection of personal data) and the right to disconnect, irrespective of the worker’s employment status. Concerning wages, the charter provides workers with the right to a minimum fixed hourly income, as opposed to compensation schemes according to which platform workers are paid by

the number of deliveries made. Only those who sign the charter must observe its provisions.

A second significant agreement was concluded with Just Eat in 2021 by CGIL, the Italian Confederation of Trades Unions and the Italian Labour Union. This agreement enables the application of the Logistics National Collective Bargaining Agreement to Just Eat’s workers. Its riders gained access to a fair wage, labour rights, and social, health and safety protections. The agreement also includes measures on the pay scale of the workers, up to 4,000, whom Just Eat plans to recruit and progressively involve in the contractual process. Aside from establishing protections and rights for workers, the agreement is also important to Italian trade unions because it clarifies a major point concerning negotiations with multinational companies managing workers through algorithms: there is no need to create new instruments, as it is sufficient to apply existing ones, such as national collective agreements. Following the conclusion of the confederal agreement, the federations also finalised a company-level agreement defining the transition from a model based on the use of self-employment and precarious work to a fairer organisational model. Parties will also engage in negotiating a performance bonus for the workers. The agreement is also the result of the successful mobilisation by confederations and federations at national and local levels over recent years, which increased the Italian unions’ representativeness and capacity to negotiate.

Trade unions’ awareness-raising initiatives in the agricultural sector: Preventive approach

In some economic sectors with a high risk of labour violations (agriculture, construction, logistics, hospitality), trade unions are particularly attentive to promoting initiatives aimed at ensuring the respect of legislation and collective agreements, including compliance with minimum wages set by those agreements. In Italy, an interesting case concerns trade unions’ awareness-raising initiatives such as the one called Sindacato di Strada in the agricultural sector, promoted by the Italian sectoral federation of CGIL, and a similar one, Tutele in Movimento, promoted by the Italian Federation of Agriculture, Food and the Environment. Diffused throughout the country, trade unions contact workers directly at workplaces or meeting places, and using vans in town squares. They provide workers with brochures, available in up to 14 languages, covering various subjects such as agricultural unemployment and (in 6 languages) work security. Such information is also available through the app WEFAI, a digital tool through which authorities also collect complaints from workers who report irregular working conditions. The Italian Federation of Agriculture, Food and the Environment also has a hotline that provides this type of service. In this way, information campaigns provide workers with various channels through which they can both receive information on their rights and have their voices heard. The aim is to spread information about and support for workers’ rights, and important information about contracts and documentation, and to detect potential irregularities and exploitation at the workplace.

Lithuania

Warned to Choose campaign: Balanced approach

Since April 2015, Sodra and the STI have been using a systematic model of preventive and control measures called Warned to Choose with the aim of reducing the scale of tax and contribution evasion related to employment relationships. This initiative identifies businesses that are not complying with regulations relating to the non-recording of all hours worked by employees and the payment of envelope wages (when a portion of the wage/salary paid to the worker is undeclared by the employer). In such cases, the companies receive a warning letter from the interdepartmental working group composed of members from Sodra, the STI and the State Labour Inspectorate, and are subject to strict control procedures by the STI if they do not explain or rectify the situation within a certain time frame. In order to identify potential non-compliant companies, authorities perform a comparison of the databases of the State Labour Inspectorate, the STI and the State Social Insurance Fund Board in order to identify companies that appear to be 'risky taxpayers'. Authorities use the following criteria to assess the risk profiles of companies and impose enforcement measures.

- Gross wages paid to companies' employees are below the median of the sector and/or municipality.
- A significant proportion of the company's employees receive less than the statutory minimum wage, that is, they work on a part-time basis.

Open Sodra: Preventive approach

Open Sodra is part of a joint project between the State Social Insurance Fund Board and the STI to publish, on a public website, wages calculated by insurers (employers) for insured employees. This database is open source and allows everyone to see the average wages calculated for each employer's employees and compare them with the wages of employees working in the same economic activity or operating in the same municipality. The aim is to encourage the general public (individuals, businesses and journalists) to call attention to employers who underpay their employees by failing to pay employment-related taxes. Furthermore, the database enables other businesses to see how their wages appear in a broader context. Indicators in this database pique the interest of supervisory and control authorities. Indeed, some government initiatives are based on it, and it is particularly useful for the labour inspectorate's monitoring activities. In addition, on Sodra's website there are multiple calculators, which increase awareness among workers.⁵¹

Netherlands

Cooperation Agreement for Intervention Teams: Balanced approach

In 2003, the Ministry of Social Affairs and Employment established the Cooperation Agreement for Intervention Teams. The idea was to create intervention teams that work together to reduce and prevent tax and social security fraud, benefit fraud, labour law violations and related abuses. In 2017, such cooperation between partners was expanded, creating a partnership among the Ministry of Social Affairs and Employment, which acts as chair and secretariat of the LSI; the Dutch Labour Inspectorate; the Employee Insurance Schemes Implementing Body; the Social Insurance Bank; the Tax and Customs Administration's SMEs Division and Benefits Agency; the Ministry of Security and Justice; the Immigration and Naturalisation Service; the police; the Board of Procurators General (the public prosecution service); and various municipalities.

The organisational structure of the intervention teams consists of two layers.

National level: The LSI is responsible for the operation of the teams, determines the annual plan and considers project proposals from the partners and organisations involved.

Projects in teams: The operational management of a project is delegated to one of the members of the LSI. Each project has a specific team with a leader, accountable to the LSI.

The LSI makes a selection of the relevant topics to be dealt with each year. Intervention teams target specific sectors or specific geographical areas in which the risk of violation of laws and non-compliance is high. The intervention teams are not always available, since they are only deployed when other means of enforcement have not led to the desired results.

If an intervention team wants to take action (which becomes a project), partners will submit a proposal to the LSI. Depending on the chosen theme or targeted group, one of the partners will be responsible for the project. Depending on the type of the project and the size of the issue, an intervention team project takes from a few months to more than a year. The intervention team makes unannounced inspections and establish dialogues with the individuals involved (e.g. employers and workers) in order to carry out its work. Before inspections, data about the workplace and individuals involved are collected, and they are then verified through inspections. Since different bodies are working together, communication is important. Thus, file-by-file checking takes place within the intervention team, guaranteeing data privacy. Furthermore, the LSI has developed a communication tool and strategy (*Communicatietoolbox LSI*). Besides carrying out inspections, intervention teams can adopt an awareness-raising role, providing workers with

⁵¹ Pension annuity calculator, calculator of projected pension, sickness benefit calculator, childcare benefit calculator, maternity/paternity benefit calculator, self-employment tax calculator, calculator of child maintenance, business testimony calculator as a tool to calculate state social insurance and compulsory health insurance contributions, unemployment benefit calculator, pension age calculator, work experience conversion calculator.

information (available in several languages) about their rights and legislation. When speaking with foreign workers, members of the intervention teams generally use translators.

Wet Aanpak Schijnconstructies: Deterrence approach

The Sham Constructions Law (*Wet Aanpak Schijnconstructies*, WAS) was introduced by the Dutch government in phases between 2015 and 2017 and is still in force. The Dutch term *schijnconstructies* (sham constructions) is used for methods that employers use to avoid paying minimum and collective agreement wages. Therefore, the WAS consists of measures to counteract the harmful effects of such misconduct, granting better protection for workers and fairer competition for employers. Among the main measures introduced by the law, the following are highly relevant to compliance with minimum wages.

Chain liability for wages, where the employer and the clients are liable: Employees who receive from the last company in the chain (the final performer) none or only some of the wage to which they are entitled can hold all the links in the chain liable: the employer, the intermediary company (or companies) and the client. The law introduces a concept of successive or sequential liability, meaning that all links in the subcontracting chain, up to and including the main client, may be held liable for unpaid wages.

Mandatory payment of minimum wages through the bank: Employers have to pay the statutory minimum wage through the bank and cannot pay in cash.

Payment of the full minimum wage: Employers are required to pay the full minimum wage to employees. All sham constructions that prevent the payment of minimum wages are prohibited.

Clear payslips: Employers are required to provide workers with understandable payslips, meaning that how the wage is structured and all the amounts within it must be clear.

Naming and shaming: On a dedicated online portal, the labour inspectorate publishes the names of all companies that have been inspected and all those that have been fined due to non-compliance with labour legislation, including minimum wages. In particular, the information published includes the name and location of the company, the number under which the company is registered, the laws that have been checked during inspections, the location in which the inspection took place, the date of the inspection, and the legal remedies that have been or may be taken against the decision, together with the outcome.

Extension of generally binding declaration: With the objective of improving compliance with and enforcement of collective agreements, under the WAS they can now be

generally applicable or extended in time. Thus, through an extension, collective agreements can apply to all companies in a specific industry.

Exchange of information: When the labour inspectorate suspects that an employer is not complying with collective agreements (and, in particular, collective wages), it exchanges information with the employer organisations and trade unions involved in the sector. Its suspicions of underpayment are based on possible gaps that may exist between the statutory minimum wage and the collectively agreed minimum wage.

Slovakia

Responsible Employer programme: Preventive approach

The Responsible Employer programme was launched by the National Labour Inspectorate in 2020 with the overarching objective of promoting the reputation of employers with established good practices in the area of employment and working conditions. The programme relies on a tool designed to support the implementation of an appropriate human resources management system aimed at improving the working conditions of companies. The initiative entails the formal recognition of registered companies as 'responsible employers'. To obtain such accreditation, the listed employers have to comply with the requirements developed by the National Labour Inspectorate. Labour inspectors also evaluate compliance with these conditions by carrying out on-site examinations. The certificate that employers receive based on meeting the requirements of the programme is proof of not only an excellent level of care for employees, but also having established a human resource management system, which is a prerequisite for the continuous maintenance and improvement of this status. After five years from the date of issue, the certificate will expire. Within six months of the certificate's expiration date, the responsible employer may submit an application to extend its validity for an additional five years. Furthermore, if the holder of the certificate commits a major violation of labour laws, the certificate may be withdrawn. Any employer or organisational component of a company established in Slovakia may participate in the Responsible Employer Programme.

Spain

Fraud Mailbox (ITSS Mailbox): Preventive approach

The ITSS Mailbox was created by the labour inspectorate in 2013 to allow citizens, whether workers or not, to send anonymous complaints about undeclared work or shadow economy situations.⁵² The mailbox includes in its portal the option for individuals to directly select

⁵² The ITSS Mailbox was first called *Buzón de Lucha contra el Fraude Laboral* (Mailbox against Labour Fraud) and was created with the intention of simplifying reports by asking the complainant only a few questions through the Ministry of Labour website, such as the name of the enterprise, its address and economic activity, and a brief description of the possible labour fraud. In 2018 the mailbox was modified through a new government strategy against precarious labour conditions. The new plan modified the scope of the mailbox and changed its name to better represent this reorientation, becoming *Buzón de la Inspección de Trabajo y Seguridad Social* (ITSS Mailbox). Through this new strategy, the aim was to incorporate and identify the most common behaviours on the part of employers that imply labour precariousness, such as non-compliance with minimum wages.

from a list of possible labour irregularities the event(s) that best represent(s) the motivation of the complaint. In this way, the mailbox provides the individual with the opportunity to better specify the conditions in question, embracing common phenomena such as irregular contracts, extraordinary hours, discrimination in access to employment and at work, gender discrimination in wages and sexual harassment. Since 2018, the labour inspectorate has adopted a new strategy for classification of reports that divides them into five categories: health and safety, labour relations, employment and foreigners, social security, and other types of proceedings. Each of them, in turn, is divided into several categories that imply non-compliance with labour law. The mailbox also includes a fast system for classifying the emails that arrive through it. They are first analysed by the national inspectorate and then classified as (i) possible inspection actions, which are allocated to provinces and sent to the provincial inspectorate, which carries out the necessary assessments; (ii) communications to file, since they do not relate to the jurisdiction of the labour inspectorate or are unjustified; and (iii) incomplete communications due to missing data.

Campaign to combat non-compliance in domestic work: Preventive approach

The Spanish inspectorate's campaign in the domestic work sector with the aim of combating non-compliance with wages and social security contributions was launched in 2021 by the national labour inspectorate. The initiative involves the delivery of thousands of letters to employers of domestic workers (families) that have established regular contracts but that have not updated their payments in line with minimum wage increases during the last few years. The letters play a preventive and sensitisation role, raising the awareness of employers that are not complying with regular wages and contributions. In this sense, the strategy does not provide for the use of sanctions; instead, it offers information and counselling to employers. Besides letters about minimum wage violations, the labour inspectorate offers an online portal with more information through a frequently asked questions format, supporting employers that have difficulties in understanding the correct implementation of wages. Furthermore, the inspectorate publishes a form online that explains the different ways to regularise wages and contributions. The campaign has been divided into two rounds: whereas the first round, in 2021, targeted employers of full-time domestic workers (40 hours per week), the target of the ongoing second round (initiated in January 2022) is those employed part time or by the hour. The goal of both rounds is the employer's voluntary regularisation of wages and contributions. Letters are sent by the central services of the labour inspectorate, which notify employers of their current non-compliance with labour conditions. Employers that receive the letter have three months to update their payments of minimum wages and social security contributions. If they do not, a subsequent phase consists of a pure inspection action. After the deadline, the labour inspectorate generates inspection dossiers on those employers that have not regularised the workers' conditions. This second phase

is carried out by provincial inspectorates, which go to the employers' residences to understand the reasons for non-regularisation. The inspection could lead to an infringement procedure.

Sweden

Fair Play Bygg in the construction sector: Preventive approach

The Fair Play Bygg initiative was launched in 2016 with the ultimate goal of allowing individuals (whether workers or not) to report illegal activities in the Swedish construction sector. The project, financed by the trade union Stockholm-Gotland Byggnads and the employer organisation Stockholm-Gotland Byggmastareforening, consists of an online tip-off form through which people send anonymous tip-offs and complaints about criminal business practices. The website is available in Swedish, and in English and several other foreign languages. When Fair Play Bygg receives information regarding suspicious activities in the construction industry, it supplements it with additional material from other agencies and then reports everything to the competent authorities. In this way, the project serves to make the process of information collection and reporting more rapid and efficient. In order to verify the information obtained through the anonymous reports, Fair Play Bygg employs open and secure sources while auditing a firm. Those sources can include, for example, the tax agency, the companies registration office, the courts and the transport agency. Furthermore, it may review social media accounts and perform online research, and professional security firms may investigate. If suspicions about the company persist after this initial investigation, then the examination will be more rigorous. The working group transmits the information to the authority deemed to be the most appropriate recipient. Typically, information on serious and large-scale crimes is shared simultaneously with multiple authorities.

The main objectives of Fair Play Bygg include enhancing the reputation of the construction industry, improving competitiveness and working conditions in the sector, supporting authorities with their tasks and increasing tax revenues for society.

2 Main contextual factors

Context is a key concept in developing realist explanations of the way certain policies/measures produced certain outcomes by means of specific mechanisms. In the realist approach, context is conceptualised as a set of factors influencing when and how an intervention is delivered and how mechanisms are triggered. Thus the context represents the structure of resources (material and immaterial) that are available (implementation context) and, at the same time, can influence the reasoning of those involved during the measures' implementation.

The analysis of the 21 case studies shows that significant factors in the policy context of the considered measures emerge in terms of determining the type of policies that are adopted and the way in which they are implemented. Contextual differences exist between and within Member States (and specific sectors), leading to specific strategies that emerge considering countries' specific institutional, socioeconomic and cultural contexts. Although each case study has its own distinctive context features, in comparative terms some common contextual factors for enforcing compliance with minimum wages are identified as follows.

Workers' vulnerability and precariousness: sectors at high risk

Most of the 21 case studies are set in the context of addressing the situation of vulnerable and precarious workers. While this is a common trait across most economic sectors, especially for certain subgroups of workers (young people, migrants, women, etc.), it emerges strongly with regard to the five sectors to which the case studies are related.

Construction sector

The construction sector's relevance in terms of (non-) compliance with minimum wages is brought about by typical features of the industry that produce vulnerable conditions for construction workers. In particular, the construction industry is characterised by:

- strong competition between construction companies and complex supply chains (as will be further explored in the following pages)
- fragmentation of work and a high level of mobility among construction workers
- a large number of foreign workers and/or posted workers who, due to the informality of their working conditions and the lack or difficulty of workers' representation, are characterised by high precariousness in the labour market

These features are clearly shown in the four case studies that deal with the construction sector in Austria, Germany and Sweden (namely the ISHAP system and BUAK in Austria, SOKA-BAU in Germany and Fair Play Bygg in Sweden).

In **Austria**, construction is one of the largest employment sectors for both employed and self-employed workers. Workers are in high demand, construction companies have plenty of orders and prices have gradually risen (Haidinger and Papouschek, 2021). Furthermore, from both sending and receiving perspectives, construction is the sector that employs most foreign and/or posted workers in the country. This large flow led the Austrian government to introduce the Law against Wage and Social Dumping (LSD-BG)⁵³ in 2011, in order to prevent social and wage dumping by bringing in stricter controls and penalties and by ensuring equal pay conditions and fair competition between Austrian and foreign companies. Despite the introduction of the LSD-BG, various forms of wage dumping in Austria continue to be present. In particular, cases of underpayment in the construction sector are common; it has been reported that 60% of offences of underpayment in Austria involve foreign companies, while approximately 44 out of 100 cases inspected in the construction industry are of suspected underpayment (Danaj and Scoppetta, 2022). Among the main strategies used by construction employers to cover non-compliance with minimum wages are incorrect documentation of working time, incorrect reporting of skills level, disregard of minimum wages and applicable collective agreed wages, using the home country's legal framework for setting pay rates, and salary deductions for accommodation and other expenses. The Austrian intervention BUAK was endowed with enforcement powers through the LSD-BG. The institution has also acquired the power to co-produce regulations, provide proposals to competent ministries and legislators, and influence implementation. BUAK's social partner representatives have other political functions as well, being members of parliament or of political parties. In this sense, the paritarian institution has a significant impact on the political arena, since its ideas and proposals are brought to administrative and political bodies in charge of legislation (Haidinger and Papouschek, 2021).

Just as much as in Austria, the construction industry in **Germany** is one of the most important sectors of its economy; it represents Europe's biggest construction market and provides employment to approximately 2.5 million workers.⁵⁴ While it is one of the most important industries in the country, the intensification of competition that took place in the EU in the 2000s has triggered significant pressure on construction companies, which have adopted cost-cutting strategies (Schulten and

⁵³ The Law against Wage and Social Dumping, introduced in 2011 as the LSDB-G, has, since since 2017, been known as LSD-BG.

⁵⁴ See Federal Statistical Office of Germany database, available at <https://www.destatis.de/EN/Themes/Economic-Sectors-Enterprises/Construction/Tables/key-figures-construction-industry.html>

Schulze-Buschhoff, 2015). In a sector largely dominated by small companies, this background leads to the promotion of precarious working conditions, facilitated by difficulty in enforcing and verifying minimum working standards.⁵⁵ The use of these illegal employment practices represents a significant issue for foreign and/or posted workers, who play a significant role in the German construction sector. In Germany, only the logistics industry posts more workers.

Germany, in fact, represents both the main receiving country and the main sending country of posted workers in the EU. In 2020 the country received 16.9% of all posted workers among the EU Member States and it accounted for 37% of the outflow (Albrecht et al, 2022). In the following year, despite COVID-19 travel restrictions, posting increased further in the German construction industry (SOKA-BAU, 2021). The ‘main construction’ industry (*Bauhauptgewerbe*), the largest branch of the sector, involves nearly 800,000 construction workers, of whom more than 10% are posted workers (83,112).⁵⁶ Moreover, it includes as many as 4,345 posting companies. The significant flow of postings seems to be related to a constant increase in the import of services provided in the construction industry (Wispelaere et al, 2022), while the force driving German companies to award contracts to foreign subcontractors is the lower prices and, therefore, lower wages in the foreign country (Bosch and Hüttenhoff, 2022). Only since 2016, with the revised German Act on the Posting of Workers (*Arbeitnehmerentsendegesetz*, AEntG), have posted workers in Germany received the same minimum wage and the same working conditions as workers with German contracts.⁵⁷ This has led, however, to new challenges for companies due to additional costs and administrative burdens. Consequently, the new legislation hardly changed workers’ labour conditions. Construction companies respond to the increased price competition with several strategies; they continue to use a foreign workforce (which is already cheaper because of the lower hourly wage and the high level of compliance) and pay lower wages to (mostly foreign) workers through false classification of qualifications (Bosch et al, 2011).

Against this background, the German intervention SOKA-BAU provides various services and social security procedures covering both German and foreign construction companies and workers. Therefore, the whole construction company benefits from SOKA-BAU’s system, but the main beneficiaries of SOKA-BAU’s specific activities favouring compliance with minimum working conditions are foreign/posted workers. Overall, the activities of SOKA-BAU that concern compliance with employment standards favour posted workers and address the difficulties that they might encounter when working in Germany. SOKA-

BAU is, therefore, the main body dealing with posting issues in construction and, through its legal bases, in labour law issues concerning posted workers (Fechner, 2020).

Lastly, in **Sweden** the construction industry represents one of the economic sectors with higher rates of non-compliance with collectively agreed minimum wages. This takes place, in particular, due to negligence in enforcement in supply chains in which subcontractors pay less than the agreed wage in contracts. Recently, the Swedish Construction Market Commission (Byggnadsmarknadscommissionen) reported that 75% of construction firms from Czechia, Estonia, Latvia, Poland and Slovakia engage in unlawful business activities, such as non-compliance with Swedish minimum wages (Svenska Byggnadsarbetareförbundet, 2021). Besides non-compliance with minimum wages, other types of violations of law take place in the Swedish construction industry, among them tax offences, undeclared labour, and human exploitation and trafficking. In this context, the Swedish Work Environment Authority is the primary enforcement institution regarding these types of illegal activities. Employer organisations and trade unions are significant enforcement institutions as well. In particular, the trade union Stockholm-Gotland Byggnads and the employer organisation Stockholm-Gotland Byggnadsastareforening financed the Fair Play Bygg initiative.

Meat processing industry

Like the construction industry, the economic sector dealing with meat processing is also characterised by precarious conditions and irregular practices. This was particularly evident during the COVID-19 pandemic. In this regard, the **German** meat industry is worthy of attention. Germany represents one of the main international players in the meat industry. In particular, the country is the leading processor of pork in the EU, leading the European market in its production and export, with 5.1 million tonnes of pork produced in 2020.⁵⁸ Despite this commercial success, the German meat industry is also known for developing a low-cost production model. Its industrial slaughtering and meat cutting dates back 30 years, during which time the German meat sector has undergone structural changes from small businesses to an industrialised sector with a few market leaders (Bosch et al, 2020).⁵⁹ With the concentration of production activities in a few large companies in the meat processing industry, a process of deskilling of workers has dominated the sector, consequently leading to precarious employment conditions (Eurofound, 2018). Furthermore, a disproportionate use of alternative forms of contracts

55 Construction companies with up to 10 employees represent almost 80% of all construction companies (SOKA-BAU, 2021).

56 The German construction sector is divided into different branches involved in the different steps of the construction process. The main construction industry includes the construction of buildings and civil engineering, demolition and site preparation, roofing, and scaffolding.

57 The sectoral minimum wage applied until 2022, but in that year the social partners did not agree in negotiations, leading the construction industry to revert to the statutory minimum wage.

58 Data from Eurostat, available at https://ec.europa.eu/eurostat/databrowser/view/TAG00042/default/table?lang=en&category=agr.apro.apro_anip.apro_mt.apro_mt_p

59 The German meat sector is divided into two major areas: small butchery trades (known as *Handwerk*) and the meat industry. In the latter, firms concentrate exclusively on slaughtering and processing of animals, the areas in which the most precarious work conditions are prevalent.

predominates through subcontracting, temporary agencies and posted workers. No official statistics are available for the proportion of contract workers in the meat industry but estimates after parliamentary inquiries revealed that 7 in 10 workers in the meat industry are employed as contract and temporary workers, with only 29% of the whole workforce regularly employed (Deutscher Bundestag, 2020). To cut costs and increase profits, firms engage in complex subcontracting structures that prevent the assignment of liability, replacing core workforce with cheaper, posted workers (Albrecht et al, 2022).

Besides the high fluctuation in demand that temporary work and posting imply, the German meat industry has been heavily affected by precarious working conditions due to specific characteristics of the sector. Nearly 70% of foreign workers in the meat industry quit their job within a year, reporting working conditions much worse than those that were initially stated by their employers. In addition, a high percentage of foreign workers is exposed to disciplinary dismissals, being accused of not being quick enough, getting sick for long periods or having accidents (DGB, 2020). Furthermore, most breaches in workplaces concern excessive working hours, illegal wage deductions and lack of health and safety facilities (Erol and Schulten, 2021). Wage dumping has become a long-running issue, with wages of less than €5 per hour and working hours of more than 15 hours a day. Furthermore, expensive accommodation, transportation costs and working clothes are deducted from the already low wages (Bosch et al, 2020).

Under such conditions, successful regulation and fair working conditions become extremely difficult to implement. Nevertheless, this scenario has been gradually changing since 2020 with the Occupational Safety and Health Inspection Act. After one year, the act demonstrated clear results in the reorganisation of labour relations (bpb, 2021), which, in the German labour market, have a significant role in the stability of the various industries. The fragmented social dialogue and unwillingness to cooperate that characterise the German meat industry are carefully treated in each point of the legislation, demonstrating that consistent reregulation of the meat industry is possible (EFFAT, 2023). The mechanisms through which the act is able to reach these successful outcomes will be explored in Chapter 3.

Domestic work

Another sector at high risk is domestic work. The higher risk of vulnerable conditions for domestic workers is well known all over the world. Paid domestic work is highly feminised, with women making up 70% of the 70 million household employees around the world, according to the ILO. A sizeable portion of these women, 11 million, are migrants (ILO, 2021). In Europe, of the approximately 9.5 million domestic workers, at least 3.1 million are

undeclared. This is particularly true in southern Europe, where in most countries domestic work represents an alternative to the limited capacity of the state to provide a solid care system of social services and financial support (González Aparicio, 2019).

Within our 21 case studies, this sector is explored by the initiative of a national campaign. In **Spain**, the domestic work sector is highly exposed to vulnerabilities; of the nearly 554,000 employed in this sector, only about 381,000 domestic workers are affiliated to the social security system.⁶⁰ Such conditions are further exacerbated by the high number of women from non-EU countries, who represent 44% of domestic workers in Spain, and by the traditional Spanish model of the domestic worker who also works as a caregiver in precarious working conditions. Recognition of the vulnerable conditions of Spanish domestic workers dates back to the 1980s. In 1982, for the first time, the political class recognised the need to regularise domestic workers in the country, and a few years later their labour status was officially recognised.⁶¹ However, only in 2022 were basic workers' rights such as unemployment benefits for domestic workers recognised in the country, a decision strongly encouraged by the judgment of the Court of Justice of the European Union in 2022, which declared that the country discriminates on the basis of sex/gender against domestic workers by not allowing them to contribute to unemployment funds and to receive such benefits (CJEU, 2022).

Platform work

The precarious situation of foreign workers in the domestic work sector is also coupled with that of those in platform work, which in many cases provides domestic services. Satisfactory working conditions in digital labour platforms prove to be challenging in a context in which platform workers' rights are not fully enshrined in EU labour law. This leads to difficulties in the enforcement of working conditions, while some countries have only now started to establish the first attempts to create an initial legal framework for the enforcement of workers' conditions and wages.

In the countries covered by the case studies, the following is the situation. In **Denmark**, since 2010, a number of digital labour platforms such as Uber (transportation), Wolt (food and wares) and Hilfr (cleaning services) have emerged, expanding across different industries. Typically, platform workers are immigrants, young individuals and members of other vulnerable categories who combine this job with a conventional one in order to reach an average income. According to Ilsøe and Larsen (2020), in 2020 1% of Danes had generated income via digital labour platforms within the previous year; however, the income is often less than DKK 3,330 per year and is often used to supplement other sources of income, thus representing a subsidiary source of income. Even though the size of digital labour platforms has increased over the

60 Data from EPA (<https://www.ine.es/jaxiT3/Datos.htm?t=4128>) and TGSS (https://w6.seg-social.es/PXWeb/pxweb/es/Afiliados%20en%20alta%20laboral/Afiliados%20en%20alta%20laboral__Afiliados%20Medios/02m.%20Por%20sexo,%20CNAE%20a%20dos%20digitos%20y%20regimen.px/table/tableViewLayout1/).

61 Royal Decree 1424/1985, through which the labour relationship of domestic workers is regularised as having a special character. This was valid until 2011.

past decade and today a wide range of labour platforms operate in Denmark, they are not subject to collective agreements or other regulations. These kinds of labour platform jobs have sparked a lot of debate in the media as well as among politicians and social partners in Denmark, especially since 2016 (Ilsøe, 2017), on how they should be regulated in terms of tax payments, competition, social contributions and the employment status of platform workers, as they affect more and more workers in the country. According to Ilsøe and Larsen (2020), the phenomenon of platform workers remains marginal, even if platform work seems to be one of the fastest-growing employment forms compared to other atypical works like temporary agency work and fixed-term contracts. The Danish 3F-Hilfr platform initiative illustrates the attempt by trade unions and other Danish partners to cover platform workers through collective agreements, providing a favourable change to two categories of workers, domestic and platform workers.

In **Italy**, the employment status of digital platform workers is a concern not yet settled in the legal system. However, several attempts have been made to regulate this situation. In the Italian framework, the first legal reference can be found in Article 47bis of the Jobs Act (L81/2015), which regulates the contractual position of food delivery workers (*ciclo-fattorini*). The same act introduced (Article 2, paragraph 1) the status of heterocoordinated self-employed workers (*lavoratori autonomi etero-organizzati*), who, by extension, can be covered by the same guarantees as employees.

A challenging bargaining process between the Italian government and social partners (L128/2019) led to the introduction of a minimum set of protections for self-employed platform workers operating in the food delivery industry in urban areas (Article 47bis of L81/2015 as amended in 2019). According to this protection level, workers are entitled to minimum pay as per national collective bargaining agreements (European Commission, 2020).

In 2020, the Supreme Court judgment of 24 January 2020, No. 1663, stated that food delivery workers are heterocoordinated self-employed workers. They therefore potentially benefit from L81/2015 and hence have the same guarantees as dependent employees. As a result, the National Labour Inspectorate can require the application of the employee status protection on an easy burden of proof (European Commission, 2020). The judgment seems to clarify the interpretation of much-debated provisions introduced by L81/2015 to stop the misleading use of the Italian ‘third status’ (also called ‘quasi-subordinate work’). Following these judgments, some local governments have introduced ad hoc regulations through ad hoc agreements to improve the working conditions of riders in the food delivery sector, such as those explored in our case studies.

Agriculture sector

Workers are also very vulnerable in the agriculture sector, which is characterised by precarious working conditions and scarce labour protection. Much agricultural work is, by nature, physically demanding. In terms of injuries and accidents at work, it is one of the three most insecure

sectors of activity, together with construction and mining (ILO, 2009). As it is a high-risk and labour-intensive sector with vulnerable working conditions, its functioning is heavily dependent on a non-national labour force, and it regards the exponential increase in foreign workers as a potential source of underpaid and unqualified labour. Indeed, the proportion of national workers in agriculture is constantly falling due to its precarious working conditions. This is evident in some EU countries, such as Denmark, Italy and Spain, where the share of migrants employed in the agricultural sector is 6% to 9% higher than the share of migrants employed in any other sector (European Parliament, 2021).

In **Italy**, a high share of the workforce in the agricultural sector is made up of illegal migrants. The precarious working conditions are exacerbated by the very fragmented collective bargaining structure, which leads to wage dumping. Therefore, in the Italian agricultural sector, trade unions are particularly active in promoting initiatives, seen in Chapter 1 of this part, aimed at ensuring the respect of legislation and collective agreements, including compliance with minimum wages set by those agreements.

Complex wage compliance procedures

Independently from being countries in which the minimum wage is based on statutory legislation or on collective bargaining, most of the case studies present a context of minimum wage setting and implementation where rules and procedures are not always easy to understand, especially for foreign and posted workers. Many of the case study interviewees stressed the fact that, even with legislation (statutory or on collective bargaining rules), minimum wage compliance can be based on frequent changes and considered excessively rigid, highly focused on provision of documents with a high level of bureaucratisation and, in some cases, decoupled from the reality on the ground.

This is the case in **Spain**, where the legal and procedural framework concerning domestic work proves to be a hindrance factor preventing minimum wage correct implementation. The Spanish minimum wage has been constantly revised since 2016. The Spanish labour inspectorate recognises that it is difficult to comprehend the procedures needed to comply with social security contributions and thus also for employers to comply with the minimum wage, and that people are misinformed about them. One reason for this is that the system used to calculate social security contributions for those employed in the domestic work sector (in contrast to those in other sectors) does not allow automatic updates arising from changes in legislation. As a result, employers in this sector (i.e. householders) find it difficult to calculate the correct social security contributions. The difficulty in understanding the system is also affected by the constant revisions of the Spanish minimum wage, leading householders to involuntary non-compliance with labour regulations. This is also aggravated by domestic workers’

clear lack of information concerning their rights (Albertos, n.d.).

Even if legislation has not been simplified, some campaigns and initiatives have been launched by national authorities. An example is the Spanish campaign to combat non-compliance with rules on wages and social security contributions in the domestic work sector seen in Chapter 1. The campaign has led to significant increases in awareness among employers, which will be assessed in detail in Chapter 4.

In **Italy**, a similar issue arises from the very fragmented collective bargaining structure, which is characterised by competition between the collective agreements of the most representative trade unions and pirate collective agreements (Eurofound, 2020), leading to uncertainty about the applicable minimum wage floor. In the last 10 years the number of national collective agreements has grown enormously (by 170%), reaching a total of 933 (including pirate agreements) in the private sector in 2021, of which only 210 were signed by the leading Italian trade unions. Non-representative agreements are associated with significant wage penalties (up to -8%) compared with regular collective agreements. Moreover, it is also difficult to identify what components of the remuneration are to be considered in assessing the minimum wage.

Likewise in **Austria**, a critical issue identified in the construction sector concerning compliance with labour conditions in posting is the difficult bureaucratic procedures that arise from the legal framework for posted workers and posting employers. Under the LSD-BG, more complex bureaucracy is required for posting companies than for domestic ones, leading posting employers to face difficulties in the correct interpretation of legislation and, therefore, to involuntarily not comply with it. While BUAK offers advisory services for posted workers, ISHAP's main aim is to help those posting employers that are willing to comply with legislation to complete the important documentation required by authorities when they employ posted workers in Austria.

The wide diffusion of digital tools and their use as mechanism to support minimum wage compliance (as is clearly shown in the next chapter) is a correlated important contextual feature minimising procedures' complexity.

Limited human resources to enforce minimum wage compliance

Another contextual feature common to many case studies is related to the limited human resources in the labour inspectorate and/or any other national or local public bodies or institutions related to compliance with minimum wages. By following a generalist approach, in all countries public institutions involved in minimum wage enforcement also have various powers in labour law to supervise compliance with labour market regulations. Consequently, in many cases resources are only partially adequate for effective enforcement. This issue proves to be decisive for the design and implementation of some policy

measures for the enforcement of working conditions and minimum wages. In particular, in southern and eastern Europe, understaffing in the labour inspectorate reduces the capacity of enforcement institutions and influences authorities' actions. Consequently, specific policy measures (and related mechanisms) have been developed that counterbalance this shortcoming by supporting the inspectorate's work.

This contextual feature, therefore, has proven to influence both the design and the outcomes of the case studies analysed. For example, going into details of some of the case studies analysed, understaffing has proven to be decisive for the implementation of measures in Italy, Lithuania and Spain.

In **Spain**, the national inspectorate has been struggling for years with understaffing, presenting a ratio of 1 inspector for every 13,000 individuals in the active population. According to EU recommendations, there should be 1 inspector for every 10,000. The limited personnel, together with structural characteristics of the Spanish economy, reduces the capacity of enforcement institutions. The large number of micro and small companies in Spain requires additional resources, especially since it is in SMEs that most cases of irregular practices are detected. Under these conditions, Spanish authorities are developing strategies that help authorities identify potential cases of non-compliance more rapidly, such as the ITSS Mailbox, mentioned in Chapter 1.

Likewise, in **Italy**, in recent years the labour inspectorate has suffered staff cuts of 30%, going from 6,463 full-time equivalents in 2007 to 4,510 in 2020. This reduction of 1,953 is mainly because of the limited economic resources available. In such conditions, the unique identification code assigned to each different collective agreement, discussed in the case study, led to the creation of a database of matched minimum wages for all employees, facilitating the establishment of a wholly integrated system.

Authorities from both Italy and Spain see the limited staff available as a determining factor for the design of policies favouring compliance. In both cases, digital classification of files and information seems to respond best to this issue.

In eastern Europe, shortage of human resources also seems to be relevant for policy designs in **Lithuania**, where the national labour inspectorate has difficulties in attracting new employees. The problem of attracting staff with the necessary abilities is not only a problem for the labour inspectorate, but also for a large part of the civil service. This has been linked, in particular, to the increasing wages in the market, leading to less attraction towards less well-paid occupations. Consequently, Open Soda and Warned to Choose, mentioned in Chapter 1, support authorities' identification of potential cases of non-compliance by means of fast-tracking procedures.

During the analysis of the case studies, it was confirmed that, in a context characterised by limited human resources, digitalisation plays a crucial role in the design of activities and in the outcomes achieved. The use of digital tools is present in most cases studied, but its emphasis

varies across sectors and countries (for example, see Box 2 in Chapter 3). Furthermore, its correct functioning depends significantly on the accessibility of finance and of support organisations and institutions, affecting its adaptability and transferability.

Legal and regulatory frameworks with a holistic approach to compliance

When enforcing labour and minimum wage compliance, several Member States follow a balanced strategy, with both preventive and deterrent measures. From the policy analysis of the selected case studies, the existence of legal and procedural frameworks in which this holistic approach to compliance is present emerges as a significant context feature when defining policy interventions. A legal framework in which minimum wage compliance is based on first preventive and then deterrent actions allows labour authorities to operate proactively and scale up actions when needed. In particular, deterrent interventions include strict sanctions with significant dissuasive power. National authorities and stakeholders involved in compliance regard such a two-step strategy, which concludes with strict penalties, as a major factor in the extent to which policies aiming at compliance with minimum wages are effective.

This combination in the context of implementation is found, in particular, in Austria and Belgium, where national authorities and social partners commit themselves to effectively disseminating relevant information and counselling on labour legislation, rights and duties, and legal frameworks, in order to keep both employers and workers constantly updated and to support them. However, if, despite these preventive practices, employers continue not to comply, the legal frameworks in place include severe actions to be taken against such illegal practices.

In **Austria**, according to the legal and procedural frameworks regarding compliance with minimum wages, a large number of preventive measures take place before legal proceedings. A large consultation and counselling network is available for both Austrian and foreign workers through trade unions, works councils and the Chamber of Labour. In particular, the chamber is considered an internationally unique institution, which was expressly established to represent Austria's workforce (Haidinger, 2018a). It is a statutory representative body that promotes the social, economic, professional and cultural interests of employees. All workers employed by Austrian firms and who pay social security contributions in the country are mandatory members and pay 0.5% of their gross salary as a membership fee to the chamber. The Chamber of Labour is the most important institution that provides counselling to employees concerning their labour and social rights, but posted workers are not members. There is an ongoing discussion within the institution whether posted workers can be counselled, since during the last 10 years the share of migrant workers seeking counselling services has been constantly increasing. In this regard, the chamber has been

able to provide legal protection extraordinarily if groups of posted workers are affected, granting them the collective representation that the Chamber of Labour is entitled to provide (Riesenfelder et al, 2012). Nevertheless, this representation remains an exceptional case, in order to protect the Austrian wage level, as the chamber is entitled, by law, to do.

The policy orientation towards a system that ensures both counselling and auditing is reflected in the functioning of GPLB audits. In this case, auditing and inspection measures take a strong preventive character as well. There are several cases in which the incorrect or insufficient payments detected were not made on purpose but rather because pay supplements or allowances, as regulated in collective agreements, had been assessed or applied in the wrong way. Therefore, while the GPLB auditors are, above all, inspectors, they also provide support and guidance on how accounts can be managed correctly.

In the case of foreign and posted workers, social partners and, in particular, the joint body BUAK (for the construction sector) adopt a significant role by directly contributing to the prevention of wage and social dumping in posting companies. As in the GPLB audits case, BUAK relies on the embedded Austrian context of prevention and deterrence by first carrying out activities that aim to support posting companies and workers but then, if non-compliance is detected, files formal complaints to authorities. Therefore, in a context that favours deterrence and preventive measures to ensure minimum wage compliance, and in which a large network of consultation and counselling institutions is available, the activities provided by BUAK develop specific mechanisms, discussed in Chapter 3, that are crucial for achieving its objectives.

Overall, the strong deterrent character in the Austrian context is given by the fines established by its legal framework, and formerly by the cumulative principle (abolished in 2021 following the European Court of Justice verdict in 2019). The cumulative principle concerned the establishment of penalties that were based on multiple single offences without an upper limit. Penalties, therefore, were the cumulative amount based on the number of employees involved and/or the number of single breaches in the company/workplace involved. With the last amendment of the LSD-BG in 2021, the cumulative principle was replaced by penalties independent of the number of workers. The new framework of sanctions establishes a maximum fine, abolishing minimum fines. This framework, however, remains very dissuasive.

Belgium presents a similar legal framework/approach in which a combination of preventive and deterrence measures is established with the aim of achieving effectiveness by using multidisciplinary strategies. As the Belgian case study shows, the authorities have established a series of initiatives aimed at raising awareness of legislation, and of undeclared work and its consequences. This information is shared through brochures, checklists, online portals and announced inspections in order to encourage the worker to be ready for audits. Following these preventive activities, however, there is a strong deterrence strategy. Within this framework, penalties adopt a key role. The Belgian Social Penal Code establishes

four levels of sanctions. While the first level consists of an administrative fine, the other three levels include criminal sanctions. Both types of fines increase according to a system of ‘additional decimals’. This means that fines increase by multiplying specific amounts specified by the Social Penal Code, for each of the four levels, by a coefficient, which varies according to the number of workers concerned in the violation of the law.

Both countries focus their activities on compliance with labour conditions but adopt different strategies and mechanisms (see Chapter 3 below) within the same context. While in the Austrian cases (BUAK and GPLB) authorities and social partners adopt a significant supportive role and not only a penalising one, in the Belgian case (Limona and Dimosa) compliance activities rely solely on a pressure mechanism. Through other interventions, Belgian authorities disseminate knowledge of legislation and advice, which should consolidate employers’ intentions to comply with Limona and Dimosa. Therefore, besides compliance with minimum wages, other objectives affect the design of the measures, and the corresponding outcomes vary considerably.

Comprehensive legal framework with an extensive scope of subcontracting chain liability

The analysis of the case studies gives significant attention to legal frameworks allowing for strict cross-checking as a crucial contextual feature. In certain sectors such as agriculture, road transport and construction, subcontracting practices are widespread due to the considerable use of posted workers and subcontracting. The latter can be used in the entire production process, including the core activities of the company and the sector, which are then carried out by subcontracted workers. Under these circumstances, complex subcontracting chains are used as a strategy to more easily avoid the correct payment of wages and social security contributions, and the fulfilment of minimum employment conditions. Therefore, the more complex a subcontracting chain, the higher the probability that workers’ rights are not complied with. Within this context, chain liability represents a potential instrument to tackle fraud and abuse in subcontracting chains, increasing posted workers’ chances of effectively enforcing their workers’ rights in the host country. To this end, in 2014 the European Union adopted an enforcement directive requiring Member States to adopt appropriate provisions, measures and control mechanisms to better enforce the Posting of Workers Directive.⁶² In particular, it requires Member States to provide for measures ensuring that posted workers in the construction sector can hold the contractor in the

chain relationship liable for their working conditions. Furthermore, Member States have the option to introduce stricter liability rules. To this end, Member States have implemented liability systems in subcontracting processes to tackle abuse in transnational subcontracting chains. Within this frame of reference, the construction sector is traditionally known as the ‘eldest one’ affected by wide use of subcontracting, and is therefore the one most often covered by Member States’ national rules (Heinen, 2017).

Germany, being both the main receiving country and the main sending country of posted workers in the European Union, assigns chain liability a key role in compliance with labour conditions and minimum wages. Chain liability was introduced into the regulatory framework by the 1996 AEntG, only in the construction sector.⁶³ German reunification had led to an economic boom in the construction industry, accompanied by social dumping. Liability provisions are used by SOKA-BAU in cases claiming contributions from contractors, since, if subcontractors do not comply with SOKA-BAU contributions and, therefore, with minimum working conditions, SOKA-BAU is authorised by law to contact the contractor, which must pay the contributions on behalf of the subcontractor.⁶⁴ The way the law has been designed thus represents a potential mechanism for SOKA-BAU to change employers’ behaviour, which will be explored in Chapter 3.

Likewise, in **Austria**, legal frameworks focusing on chain liability represent a key contextual feature for initiatives that aim for compliance with labour conditions and minimum wages in the construction industry. Under the LSD-BG, in 2017 client liability was introduced to secure wage claims from employees who are posted or hired out to Austria to work in the construction sector. The ISHAP system relies on the system of chain liability by supporting contractors and subcontractors in tracking their supply chains.

In **Denmark**, lastly, special attention is given to construction workers. During the last few years a wave of low-cost labour has poured into Danish construction sites, putting pressure on compliance with minimum working conditions. Poor working conditions are evident in public contracts in particular. As a response, state institutions must include work clauses in all contracts with private suppliers for construction, fabrication, and execution or provision of services. The work clause stipulates that all employees under these contracts must not have conditions that are inferior to the most representative national agreements, and they typically contain a chain clause to hold the contractor liable for compliance with working conditions and wages. To monitor work clauses and the chain liability that arises from them, as seen in Chapter 1, the State Control Unit for Labour Clauses and

62 Directive 2014/67/EU of the European Parliament and of the Council of 15 May 2014 on the enforcement of Directive 96/71/EC concerning the posting of workers in the framework of the provision of services and amending Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System, OJ L 159, 28.5.2014, p. 11–31.

63 In Germany, chain liability was first introduced in 1996 in the construction industry, but now applies across all industries for the minimum wage since 2015 and for several industries for additional obligations for working time records. In addition, in construction, the meat industry and parcel distribution there is also chain responsibility for social security contributions.

64 Section 14 of the AEntG: liability of the contracting entity.

the internal response team in Copenhagen Municipality focus on workplaces with a large proportion of posted workers, long supply chains and workplaces that often make use of unskilled employees. Inevitably, more attention is given to the construction industry.

Countries' pre-existing culture of partnership

Another significant context feature identified that proves to be a potential distinguishing factor of policy initiatives' designs and implementation is the presence of already consolidated frameworks of collaboration among national authorities, social partners and other relevant stakeholders. From the case studies emerges the key role of formal and informal frameworks of collaboration through cooperation agreements, exchange of information and data, and the establishment of councils and committees that have frequent meetings. Several Member States have different forms of coordination and cooperation, but a strong culture of partnership that defines the design of policies favouring compliance with labour legislation is widely identified as an important context factor.

In particular, case studies from Austria, Belgium and Germany have stressed social dialogue as a key triggering element of their institutional frameworks. In these three countries, cooperation among authorities, institutions and social partners is formalised by law or informally carried out. An intense exchange of information and coordinated cooperation takes place among all entities concerned in the fight against undeclared work and unlawful employment.

In **Germany**, the unit that deals with detecting undeclared and unlawful employment is the customs administration's FKS, which cooperates closely with other relevant authorities. The Act to Combat Undeclared Work and Unlawful Employment provides the legal framework for cooperation between the FKS and a wide range of authorities and entities such as the public prosecutors' offices, tax offices, pension insurance funds, offices for occupational safety and health, trade offices and social funds. Customs authorities and public bodies are obliged to share with each other information required to fulfil each body's task. To do so, FKS units can access data systems, provided that the information obtained is relevant to the tasks performed by the authority. At regional and municipal levels, personal meetings and contacts among the various authorities take place; joint inspections, direct exchange of information, workshops, training courses and similar practices are carried out regularly, supporting the cooperation process and the exchange of new ideas to optimise collaboration and the resources available. The involvement of social partners in enforcement can be observed in the case of SOKA-BAU, which relies on strong social dialogue and cooperation among authorities and social partners. Indeed, its paritarian characteristic was

the starting point of its creation and has been confirmed by the political and legal support given to the body. In the construction industry, collective agreements and social security funds are strongly linked to legal frameworks and regulations guaranteed by a shared commitment by the industry's stakeholders (Bosch and Hüttenhoff, 2022). Within this context, the continuous cooperation of social partners in the German construction industry was institutionalised, leading to a long collaboration between collective bargaining partners and national authorities.⁶⁵ This enhanced collaboration represents the basis of one of the main mechanisms that allow SOKA-BAU to efficiently reach its outcomes, which will be addressed in the following chapter.

A long-standing tradition of cooperation among authorities and social partners is also seen in **Austria**, with a central role for collective agreements. Currently, approximately 95% of all employees in the country work under the protection of a collective agreement and there are roughly 869 collective agreements, providing social partners with an institutionalised arena for settling conflicts of interest (European Association of Paritarian Institutions of Social Protection, 2021). This takes place, in particular, in the construction industry, in which paritarian institutions have a significant impact on political issues. By following a co-enforcement approach, meaning the combination of authorities' and social partners' forces to enforce labour standards, social partners in the construction industry are strongly involved in the design of laws and in supporting checks and audits. Co-enforcement is developed through the joint efforts of social partners and national authorities, and through the exchange of information between them about infringements and critical issues in the sector. Within a context of collaboration among authorities and social partners, and with the introduction of the LSD-BG in 2011, BUAK has enforcement powers in the construction industry, becoming an authority of its own and receiving powers independently of other inspection authorities. It has a significant impact on the political arena as well, since its ideas and proposals are brought to administrative and political bodies in charge of legislation. Through BUAK's tasks, it represents an important partner of national authorities, leading the joint body to take a significant cooperative role that becomes one of the key mechanisms (addressed in Chapter 3) for the institution to better carry out its work in the construction sector.

Finally, in **Belgium**, close collaboration among labour authorities and social partners represents one of the main distinctive features for the implementation of policies that aim at compliance with working conditions. The Belgian approach towards compliance with working conditions gives priority to consensual strategies. Thus, it is common practice for the Belgian Social Intelligence and Investigation Service, specialised in fraud detection, and the other Belgian labour inspectorates to work together with social partners to launch preventive measures. As regards minimum wages, national-level collective agreements are concluded by the National Labour Council,

⁶⁵ See Section 17 of the AEntG; Sections 2, 13 and 17 of the Act to Combat Undeclared Work and Unlawful Employment; Section 69 of Book X, Section 35 of Book I and Section 150, paragraph 3 (6), of Book VI of the Social Code. These are all regulations in different codes and acts concerning SOKA-BAU and its cooperation with the customs authorities and other relevant stakeholders. Generally, in acts SOKA-BAU is referred to as *gemeinsame Einrichtung*, meaning 'joint institution'.

in which there are representatives of the social partners at national level, both trade unions and employers' representatives. The fact that social partners on both sides agree on the minimum wage almost secures its acceptance. This acceptance is also reflected in the high level of collaboration that develops among the labour inspectorates and social partners when they are enforcing minimum wages. Authorities make every effort to consider and include social partners' positions and opinions. Their exchange of ideas and information is formal during discussions concerning the Social Intelligence and Investigation Service's strategic plan through the National Labour Council. Furthermore, a similar body exists for the self-employed: the High Council for the Self-employed and the SMEs, on which there are representatives of all the sectors with self-employed workers. The high council is involved in the strategic operational plans of the labour inspectorates as well. As regards the employer–employee relationship, it is worth highlighting the role of the joint committees (*paritaire comités*). These bodies are composed of an equal number of representatives from both employer and employee organisations, and have been set up for all industries with the aim of developing regulations to improve working conditions. With this intent, their main responsibilities are the conclusion of collective labour agreements, the prevention and resolution of social conflicts, advising the government and the National Labour Council, and similar tasks. Lastly, the long partnership between national authorities and social partners is strengthened through official partnership agreements. The general belief in Belgium is that, if measures are adopted that everybody accepts, the impact will be stronger.

While this culture of partnership is strongly recognised across the continental European countries covered by the case studies, some significant exceptions remain. In particular, different degrees of communication are identified across economic sectors within the same country, with greater or lesser intensity of information exchange. As has been seen, in Germany a strong collaboration emerges in the construction industry, institutionalised through the joint body of SOKA-BAU. However, less cooperation is identified in one of the most vulnerable sectors in the country, the meat industry. In particular, before the Occupational Safety and Health Inspection Act, the dominant model of strong negotiations did not apply in the German meat processing sector, which is still known as a low-wage industry not covered by collective agreements (Eurofound, 2018). Successful regulation becomes extremely difficult in a context characterised by great structural power of the major players in the industry and a heavy reliance on non-unionised migrant labour. The lack of collective agreements leads to low bargaining power for social partners in the sector and, consequently, to a weaker role in bi- and tripartite dialogues. With the arrival of the act in 2020, the scenario changed; it will be further analysed in the following chapters. In the German case studies, therefore, differences in partnership culture indirectly emerge, among other factors, as a consequence of the declining coverage of collective agreements, leading social partners to have a weaker role in the political arena. However, in such cases, other types of partnerships develop, as shown by the advocacy coalitions established among several unions, organisations, counselling offices, NGOs and churches (Ban et al, 2022).

3 Mechanisms

Mechanisms are a significant component of the CMO model, since they represent the responses that are triggered through the policy measure. The mechanisms are considered, then, the root of causation, the underlying causal processes that are triggered depending on the context factors and that lead to specific outcomes from the policy intervention. In this sense, it is the interaction between what the policy intervention provides and its intended target population that causes the outcomes, and this interaction constitutes the mechanism. Through the policy analysis of the 21 case studies, it was possible to group the main mechanisms identified into four broad categories as follows.

Exchange of information and coordination of different stakeholders

The first mechanism that was identified as favouring the achievement of certain outcomes is reinforced coordination among stakeholders involved, and the exchange of data and information that takes place among them. This takes the form of sharing databases, organising formal and informal meetings, and cooperation agreements.

From analysing the case studies, this mechanism is found to be particularly used in countries such as Austria, Germany and the Netherlands, where a culture of partnership among authorities is already embedded in the context, as seen in the previous chapter; however, it is also pinpointed in other countries covered by the case studies, for instance Denmark.

In the case of **Austria**, interinstitutional collaboration has allowed national authorities and social partners to focus their attention on specific sectors and target groups. Through the mechanism of structured exchange of data with the financial police and the labour inspectorate, BUAK has access to notifications of postings received by the financial police, which, together with the labour inspectorate and health insurance providers, has the same type of access to BUAK's database. Furthermore, BUAK inspectors have access not only to BUAK's database on construction sites, but also to data from the Central Coordination Unit of the Ministry of Finance and the social security database. The legal department of BUAK, on the other hand, has access to domestic and foreign databases, and to information exchange services, in order to verify

information collected, including the European Internal Market Information System. Lastly, the Competence Centres for Combating Wage and Social Dumping review suspicious cases identified by BUAK. Transnational cooperation has also been established between BUAK and counterparts in France, Germany and Italy. From this exchange of information, significant cooperation among national authorities and BUAK is developing. Regular communication allows BUAK to both increase the number of inspections and improve inspection procedures, which are two of the main aims and outcomes of the institution, which will be assessed in Chapter 4.

The similar statutory body in **Germany** for the construction industry, SOKA-BAU, highlights that, by virtue of the social dialogue and the good cooperation with stakeholders, its system is able to work efficiently. The customs authority is its main partner and since 2019 they have officially been declared cooperation partners.⁶⁶ The basis of this cooperation is through the mechanism of the exchange of information and data. When employers post their employees to Germany they have to register with the customs authority, declaring employee information such as their period of work, addresses and other data that are useful for SOKA-BAU services. Therefore, SOKA-BAU has the advantage of knowing from the federal customs authority what the posting employers are and who the posted employees are. Likewise, when the customs authority wants to carry out controls in construction sites, it contacts SOKA-BAU to obtain relevant information from its database.⁶⁷ The customs authority takes a risk management approach, by which it develops strategies for audits and inspection bodies to combat undeclared work and illegal employment in a targeted manner. This approach relies on a comprehensive analysis of shared data, in which SOKA-BAU has a significant role through its own evaluations, which contribute significantly to the positive results achieved by the customs authority. Furthermore, a soft mechanism develops between them: the customs authority has a heavy workload, so SOKA-BAU tries to solve issues encountered on construction sites by itself, and going to the customs authority is considered the last possible resort. With this exchange of information, 'jigsaw pieces' are obtained by both partners in order to have a better picture of the working conditions in the construction industry, leading to successful outcomes.

In the **Netherlands** (intervention teams) and **Denmark** (State Control Unit for Labour Clauses and Internal Response Team against Social Dumping), on the other hand, collaborative approaches are developed through

⁶⁶ With the entry into force of the Law against Illegal Employment and Social Benefit Abuse in 2019 (*Gesetz gegen illegale Beschäftigung und Sozialleistungsmissbrauch*, BGBl. I S. 1066), SOKA-BAU was included as a cooperation partner for the customs authority.

⁶⁷ See Section 18, paragraph 1, of the AEntG on posting declarations, which states that SOKA-BAU receives the posting declarations from all the posting employers in the construction industry entered at the customs authority through constant data exchange between both institutions. Furthermore, the FKS receives detailed information on postings (e.g., duration of the posting). The information that SOKA-BAU is able to provide is more than the German customs authorities receive through the posting declarations, because SOKA-BAU adds the information received from the employers when they register to participate in the paid leave scheme. In order to reduce the number of individual requests for data between SOKA-BAU and the FKS, an automatic call procedure was implemented through software called SOKA-DAT. This enables FKS officers to retrieve bundled data records from SOKA-BAU (Europe Department/Posting Workers Scheme) without the need for an individual case request, speeding up operations.

the creation of teams in which different institutions and other actors take part. The coordination triggered through these teams is based on risk assessments that define the collaborative framework through which the activities of the teams work. In all three cases, collaboration among institutions is important for defining priorities and strategies. Particularly in the Netherlands, national authorities consider that collaboration increases the effectiveness of inspections by adopting an approach based on the mechanisms of communication exchange and exchange of powers among institutions, meaning that all members of the team benefit from each other's abilities to better enforce compliance with labour conditions. The idea of working in joint teams is to supply all the necessary powers in order to best tackle the issues identified. This means that each partner's powers become all partners' powers and, as a result, the partners that participate in the team can go further than if they had acted independently.

In some of the case studies, the exchange of data and information is based on the structured use of digitalisation. Box 2 presents a good practice in Belgium for reinforcing collaboration among the authorities and stakeholders involved through digitalisation.

The above-mentioned cases have confirmed the added value of collaboration with different partners when enforcing minimum wages and labour conditions. Mechanisms for exchange of data and information and sharing of powers lead all partners to bring together diverse expertise and the jigsaw pieces in order to obtain a complete picture of working conditions and to better identify potential cases of non-compliance, gaining increased effectiveness in terms of achieved outcomes (see Chapter 4).

Changing employers' behaviour through naming and shaming

It has been widely acknowledged that reputation is a powerful social control device that has been widely used as a mechanism of public policy (naming and shaming) with strong effects on both public opinion and employers' behaviours (see Chapter 4).

In particular, naming and shaming proves to be effective for specific sectors and types of companies. Large companies and economic sectors that employ significant shares of workers are those that fear more negative public attention and tend to avoid it. While in some case studies covered (the WAS in the Netherlands and the Occupational Safety and Health Inspection Act in Germany) the mechanism of naming and shaming has been introduced in legislation and aims to expose non-compliant employers, in others (SOKA-BAU in Germany and the Responsible Employer Programme in Slovakia) authorities aim to increase compliance by rewarding compliant employers.

In the case of the **Netherlands**, the WAS has explicitly introduced this practice for all sectors through the Dutch inspectorate's website. Among the main measures introduced by the law, naming and shaming is embedded as one of the most important mechanisms for promoting compliance with minimum wages. Introducing the publication of inspection data by the national inspectorate through the WAS indirectly prevents non-compliance with minimum wages, as the functioning of this mechanism of naming and shaming depends considerably on public exposure. Indeed, the practice of naming and shaming has long been analysed by experts as a mechanism that influences individuals' behaviour and, in a labour market context characterised by excessive use of irregular practices, such an instrument represents a threat to companies and employers.

Box 2: Dimona and Limosa as digital registrations in Belgium

In Belgium, digitalisation plays a key role for national authorities. For 20 to 30 years, significant investments in digitalisation have been taking place in order to facilitate authorities' procedures through the identification of social dumping and underpayment. Nowadays, the probability of identifying irregular practices at workplaces is almost 80%, and three times as high as without data mining and the use of digital devices. Within this framework, the online registrations of Dimona and Limosa adopt a key role. Both documents, besides providing official traceability of employee–employer relationships in Belgium, provide an important reference point for Belgian authorities and inspectors to check whether social security liability and working and pay conditions have been respected. Data derived from both declarations, as well as other information collected from authorities through other practices carried out in Belgium to check working conditions, are collected in one tool, the Dolsis database. This database gives authorities an overview of the working conditions in Belgium by comparing all the different datasets in which authorities collect online information. Therefore, besides facilitating inspectorates' checks, digitalisation has allowed several authorities and relevant stakeholders in the country to join forces to tackle non-compliance. In particular, joint databases allow authorities to combine their data to have the greatest possible overview of the actual conditions of employers and employees in Belgium. Authorities, therefore, have access to the Dolsis system, but they must declare their purposes and prove why they need such information and how they are going to use it. If they obtain approval to access it, Dolsis creates a separate dataset in which only the information needed by the authority in question is displayed. Only the labour inspectors have access to all the Dolsis system. By strengthening their collaboration through digital devices, authorities are able to carry out more efficient checks of documentation for inspections. The Belgian inspectorate confirms that the combination of Dimona and Limosa with other Belgian online tools is important for authorities, since in this way they can verify the information in the online declarations.

As a significant deterrent to employers' illegal behaviours, naming and shaming has also been indirectly applied in Germany and Slovakia through award certificates, with the intent of rewarding compliant employers and, indirectly, identifying and shaming non-compliant ones.

In the case of **Germany**, SOKA-BAU awards the certificates. Construction companies that correctly pay contributions to SOKA-BAU and thus comply with that collectively agreed working condition receive award certificates that they may use as certified documents when tendering for public contracts. In a context characterised by a high level of subcontracting and chain liability, SOKA-BAU has developed this pressure mechanism, which leads construction employers to aim to obtain this certificate. Indeed, if subcontractors do not comply with SOKA-BAU contributions, SOKA-BAU is authorised by law to contact the contractor, which must pay the contributions on behalf of the subcontractor. Consequently, contractors generally look for subcontractors with SOKA-BAU's certificate, since in this way they will not risk being liable. Within this framework, SOKA-BAU has developed a tool that represents an advantage for both construction employers and workers. Through the award certificate, SOKA-BAU gives a high level of recognition to employers' contributions to SOKA-BAU and so, indirectly, also to labour conditions.

In the case of **Slovakia**, on the other hand, the Responsible Employer Programme has as its main objective to promote the reputation of employers that comply with fair working conditions, by providing a certificate of recognition. The certificate that employers receive based on meeting the requirements of the programme is proof of not only an excellent level of care for employees, but also the implementation of a human resource management system, which is a prerequisite for the continuous maintenance and improvement of this status.

Box 3 presents a good practice from Germany in the meat industry through which national authorities and, in particular, trade unions are able to increase the chances

of compliance with working conditions by changing employers' behaviour through indirect practices of naming and shaming.

Changing employers' behaviour through chain liability

The analysis of the measures considered across the 21 case studies leads us to give significant attention to chain liability as an enabling mechanism for successful outcomes leading to increased compliance. Like naming and shaming, chain liability has proven to be a significant pressure mechanism for changing employers' behaviour towards compliance. As mentioned in Chapter 2, some countries have already adopted legal frameworks of chain liability and through them triggered mechanisms that help authorities identify cases of non-compliance. This is the case with SOKA-BAU in Germany and the ISHAP system in Austria. In other cases, chain liability is introduced by the measure itself (WAS in the Netherlands), establishing the legal framework that allows authorities to track the chains that develop through subcontracting.

As mentioned in Chapter 1, in the **Netherlands** the WAS introduces chain liability for wages in the regulatory framework. The WAS creates a 'link' of responsibility between all the parts of the chain when there is non-compliance with (minimum) wages. Chain liability is of particular importance for those sectors in which subcontracting is common, such as the construction and transport industries. Furthermore, temporary workers and employees of companies that work for another company under contracts for services can also rely on the chain liability. Within this framework, the main target is the flexibility that dominates the labour market in the Netherlands, and particularly agencies that operate in bad faith. Only after a year of the implementation of the WAS did social partners and other stakeholders involved indicate that the preventive action of the chain liability was effective (Tweede Kamer der Staten-Generaal, 2016).

Box 3: The German Occupational Safety and Health Inspection Act in the meat industry

The German Occupational Safety and Health Inspection Act is grounded in indirect practices of naming and shaming and public exposure. Before its introduction in 2021, the COVID-19 outbreak had brought public attention to large meat companies, leading to a significant decline in the number of posted workers from eastern European countries. Experts have attributed a significant role in this decline to public exposure of the illegal working conditions of posted workers in the meat industry, which shed light on the urgent need for legislation in the meat sector.

As mentioned in Chapter 1, one of the main measures introduced by the act is the ban on subcontracting and temporary work. This measure, besides having clear consequences for workers, also triggers improvements for trade unions' position in the industry by exposing companies that are not willing to negotiate with them. Trade unions agreed to sign collective agreements with companies, but only on condition that the latter were willing to start negotiations on minimum wages. Attentive to public reactions in the media, companies started such negotiations, leading to major decisions in the industry, since social partners had been trying to launch collective agreements on the matter since the introduction of the statutory minimum wage in 2015. Public exposure of companies not willing to start negotiations has a significant role in achieving these results. Before the introduction of the act, companies were hostile towards agreements with trade unions and limited the unions' ability to bargain. This changed with the new legislation, through which public attention is no longer avoidable due to the stronger position of trade unions.

In **Germany**, on the other hand, as mentioned in Chapter 2, the 1996 AEntG introduced chain liability into the regulatory framework in only the construction sector, and over the years it was extended to the other industries. As has been seen, SOKA-BAU strongly relies on the chain liability mechanism in order to use the award certificate effectively. As mentioned, to avoid liability risks, the main contractor searches for a subcontractor with SOKA-BAU's award certificate, which represents a clear incentive to select subcontractors carefully and to monitor their compliance with relevant provisions. Consequently, a pressure mechanism develops, since the award certificate provided by SOKA-BAU raises awareness of those construction sites that are not complying.

Chain liability represents an essential mechanism for the functioning of the ISHAP system in the construction industry in **Austria**. Under the LSD-BG, in 2017 client liability was introduced to secure wage claims from employees who are posted or hired out to Austria to work in the construction sector. The ISHAP system is able to map a complex contracting chain system by addressing the documentation and organisation of subcontractors' personnel on the construction sites of ISHAP customers. In a context of high levels of subcontracting, the mechanism of chain liability leads clients of the ISHAP system to be aware of the risks that they would run if they employed subcontractors that do not comply with employees' working conditions. Staff, subcontractors, contractors, construction projects and individuals involved in the chain are tracked in order to provide ISHAP clients with an overview of their working relationships in the industry. Furthermore, ISHAP offers a system called the ISHAP Card through which subcontractors are required to keep records of documents required of posted employees when they are transferred to Austria (e.g. employment contract and wage classification). Such documents must be submitted to the prime contractor when they start to work on a construction site. In these circumstances, ISHAP supports both contractors and subcontractors in keeping track of the supply chain, by providing an easy and simple method to collect data from all their workers. The ISHAP Card was designed with these goals in mind, providing easy data access, editing and management, and centralised monitoring with notifications. Such possibilities prove to be essential in a context also characterised by enforcement challenges due to burdensome bureaucracy.

Changing workers' behaviour through anonymity, friendly approaches and use of native languages

From the analysis of the 21 case studies it emerges that most Member States have specific mechanisms devoted to supporting foreign and posted workers, who are

overrepresented in the most vulnerable economic sectors. Among the main challenges identified as concerns these target groups, research has confirmed their low trust in institutions, lack of knowledge about legislation, language barriers and poor representation. To improve their working and living conditions, the enablement of the individual and incentivising dialogue emerge from policy measures as the main mechanisms that lead to effective changes in workers' experiences and that allow authorities to detect irregular practices that are not easily identifiable. Such mechanisms are implemented through activities laid down by policy measures such as ensuring the anonymity of complaints and hotlines, and setting up friendly activities and dialogue in foreign languages.

The term 'enablement of the individual' refers to the encouragement of workers to take action against precarious working conditions. Due to their vulnerable circumstances and low status, foreign and posted workers are more prone to accept degrading jobs characterised by abusive working practices.⁶⁸ In this context, some of the case studies analysed involve activities aimed at encouraging workers to report employers' misconduct by providing anonymous complaint mechanisms and hotlines. These measures have proven to be relevant to vulnerable workers who, through the measure, feel safe enough to report.

It is worth highlighting that the measures identified through the case studies that allow anonymous complaints all belong to or pay significant attention to the construction industry. The **German** SOKA-BAU, for instance, is able to verify compliance with employment standards and minimum wages with particular attention to posted workers. Through its informative and advisory services before and during their posting activities, SOKA-BAU reaches posted workers. The anonymous reporting platform offered by SOKA-BAU may represent the main system to communicate with posted employees, enhancing their confidence to report. The anonymous platform was introduced in 2018 with the aim of further supporting SOKA-BAU's commitment to fight undeclared work and illegal employment. This whistleblowing system is supported by the information services provided by the institution in 14 languages. SOKA-BAU confirms that, to represent all vulnerable workers, it ensures communication in foreign languages, which leads foreign employees to feel trust in institutions. Its **Austrian** counterpart, BUAK, offers posted workers the same anonymous service in several languages, through which they can report underpayment.

In **Denmark**, the State Control Unit for Labour Clauses and the internal response team also offer anonymous platforms for reporting non-compliance. While both bodies target all sectors, the Danish authorities confirm that they pay particular attention to the construction industry, in which several cases of non-compliance have arisen, mainly concerning posted workers. Both bodies are equipped with

⁶⁸ The wage gap between what these workers can earn at home and what they get in EU countries, even if underpaid, is still substantial enough for them to accept these conditions.

anonymous hotlines through which complaints concerning social dumping are received. The Danish authorities say that the combination of anonymous hotlines with other types of assistance, such as the use of an ID card to easily identify posted workers on construction worksites, contributes to obtaining a quick overview of employees' conditions and their supply chains.

Finally, the **Swedish** Fair Play Bygg deserves attention as a policy instrument for the construction sector entirely based on anonymity. In an environment of mistrust and uncertainty, the anonymity of the online tip-off form allows the most exposed workers to report on illegal practices without fear of being identified. As a result, unlawful actions within the industry are subject to a higher level of oversight and regulation. During the research it was confirmed that the availability of the website in different languages and the anonymity of the tip-off form represent two of the most effective features of the intervention. On the one hand, foreign and posted workers can easily communicate in their own languages and, on the other hand, they are not afraid of being identified by employers. The combination of both characteristics makes the initiative truly valuable.

Box 4 presents a good practice from Spain that is entirely based on anonymity. Even though it is available to all sectors and all types of workers, and not only to the construction industry, the measure has led authorities to identify potential cases of non-compliance in the most vulnerable industries.

The other way in which policies concerning compliance with minimum wages bring about changes in foreign and posted workers' conditions, leading to successful outcomes, is incentivising dialogue. As mentioned before, one of the main challenges of foreign and posted

workers is language barriers. They often arrive in the host country with little or no knowledge of the language, diminishing their chances of knowing and understanding legislation, bureaucratic procedures, and rights and duties. Such shortcomings further increase their mistrust in authorities and institutions. Likewise, vulnerable workers from economic sectors with an elevated risk of non-compliance generally tend to fear authorities and to avoid communication with them. In order to reach them and to provide them with the necessary knowledge and information, national authorities have launched several initiatives that include tools that bring about change by encouraging dialogue. Channels of communication are activated in several foreign languages through brochures, online portals, surveys, seminars and similar 'friendly' activities that aim to reach workers through understandable and clear language. Cases that provide these type of services are SOKA-BAU in the construction sector in Germany, BUAK in in the construction sector in Austria, the State Control Unit for Labour Clauses in Denmark, Fair Play Bygg in the construction sector in Sweden and trade unions' awareness-raising initiatives in the agriculture sector in Italy. All these measures have proven to help authorities engage in dialogue with workers, and to help workers feel trust in enforcement authorities. Stakeholders involved in the implementation of these types of measures confirm that the success of these mechanisms relies on their capacity to increase trust among workers, empowering them (see Chapter 4, section 'Workers' empowerment and increased knowledge, awareness and trust'). Box 5 presents a good practice of Germany towards foreign workers, Fair Mobility. The initiative is essentially based on incentivising dialogue with foreign workers through counselling and awareness-raising initiatives.

Box 4: The Spanish ITSS Mailbox

The literature widely supports the role of anonymous reporting as a best practice in the fight against non-compliance with labour legislation. In Spain, the anonymity guaranteed by the ITSS Mailbox throughout the whole process of reporting and inspection is the most attractive characteristic of the intervention for those employees who fear vindictive actions on the part of employers. It represents the main instrument that individuals employ when they want to submit a complaint, reporting employment conditions of some workers that, otherwise, would be very difficult to identify. Since its creation, the Spanish labour inspectorate has received thousands of complaints from workers reporting their precarious conditions. Through the mailbox strategy, the framework of the Spanish inspectorate has been progressively directed towards more targeted action against hospitality enterprises. Every year, the hospitality sector represents the largest part of the inspectorate's activity about foreigners' employment, 30–40% of the total activity on the matter. Looking at the inspectorate's activity prompted by the mailbox, we see that anonymous complaints are mostly received from workers in the hospitality industry, the retail and trade sectors and the construction industry. Furthermore, the Spanish authorities, aware of the structured gender discrimination that exists among the population, have introduced through the mailbox specific activities that support the inspectorate's work in identifying potential cases concerning the gender gap. This has supported the inspectorate's activities in sectors overrepresented by women, such as domestic work.

Box 5: Fair Mobility in Germany

As seen in Chapter 1, in Germany the DGB, together with the cooperation of the BMAS, launched the initiative Fair Mobility in 2011 with the intention of providing information services to workers from central and eastern European countries.

Fair Mobility's main aim is the empowerment of the most vulnerable workers, and to do so, most of its activities are aimed at informing workers before they go to the Fair Mobility offices. Fair Mobility counsellors' intention is to teach workers how to act independently in cases of non-compliance with labour conditions. To reach the most vulnerable workers, Fair Mobility goes to strategic places in which it is likely to meet them, such as highways, stops for drivers in the transport sector, fields for agriculture workers, meat companies, and supermarkets in which workers might buy food during their breaks. By doing so, Fair Mobility is able to encourage dialogue with the most vulnerable workers, who are often difficult for authorities to reach due to language barriers and their mistrust in authorities and institutions. Therefore, it is important for Fair Mobility to reach foreign workers directly, since it could be difficult for those workers to reach its offices. Other activities such as social media posts, peer-to-peer exchange of information and campaigns promoted by Fair Mobility support the initiative to spread significant information concerning rights, obligations and enforcement practices that is useful for foreign workers. Indeed, most of the foreign workers who use Fair Mobility services become aware of the initiative through the internet and third parties, confirming the effectiveness of Fair Mobility in reaching workers in any possible way. Therefore, Fair Mobility's strategies are designed to meet the needs of the most vulnerable workers, since experts have confirmed that some factors potentially influence the amount of use they make of Fair Mobility services, in particular their level of education and what is at stake for foreign workers if they report their vulnerable conditions to authorities.

Fair Mobility's employees must speak at least one eastern European language in order to effectively reach and gain the confidence of foreign workers, who generally contact Fair Mobility by telephone, email and the anonymous hotlines. Cultural sensitivity and a target group-oriented approach are crucial success factors for Fair Mobility. By providing advice in foreign languages, Fair Mobility's employees overcome language barriers, minimising the fear of those seeking advice that they will be misunderstood due to their lack of German skills. Furthermore, counselling in foreign languages is also essential for culturally sensitive work, representing a key component in building trust.

4 Direct and indirect outcomes

The outcomes represent the results attained by the interventions included in the case studies that, directly and/or indirectly, can ultimately make it possible to increase compliance with minimum wages. As seen in Part 2, in all countries authorities involved in minimum wage enforcement follow a generalist approach, supervising compliance with labour market regulations. Therefore, most of the measures have wider aims than increasing compliance with minimum wages. That is ultimately achieved through intermediate outcomes that allow authorities to, overall, increase compliance with labour conditions. Moreover, in many cases interventions have not been evaluated (and in the few cases where they have been evaluated the focus was again wider than compliance with minimum wages), so few data exist. Accordingly, in this chapter, such intermediate outcomes that arise from the case studies are presented, emerging as a bridge between authorities and the achievement of fair working conditions including compliance with minimum wages.

Four main common outcomes arise from the case studies:

- workers' empowerment and increased knowledge, awareness and trust
- increased public attention
- lower administrative burden
- increased formalised cooperation

Workers' empowerment and increased knowledge, awareness and trust

Workers' empowerment is one of the main outcomes achieved in the case studies. Increased knowledge, awareness and trust in institutions on the part of workers have been shown to support employees' reporting of

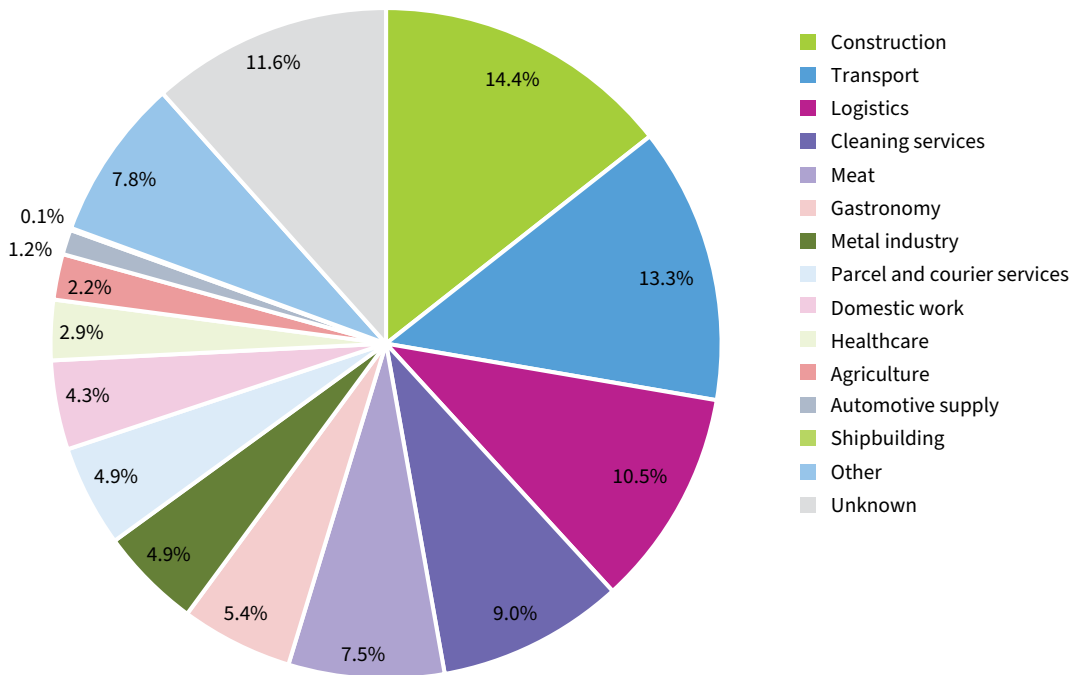
non-compliant conditions, which then helps authorities identify potential cases of non-compliance. This has proven to be particularly effective through Fair Mobility (German), BUAK (Austria), Fair Play Bygg (Sweden) and trade unions' awareness-raising initiatives (Italy).

Fair Mobility in Germany

Fair Mobility in Germany is an example in which the empowerment of foreign workers was considered evident by stakeholders interviewed. Its success depends on its ability to spread knowledge of the law and, therefore, to reduce uncertainty about the law. The most frequent reason why foreign workers contact Fair Mobility is that they do not know their rights and how to enforce them. Underpayment of wages is also among the main reasons. By providing advice in foreign languages, Fair Mobility's employees overcome language barriers, minimising the fear of those seeking advice that they will be misunderstood due to their lack of German skills. Furthermore, counselling in foreign languages is also essential for culturally sensitive work, representing a key component in building trust. Through this approach, Fair Mobility successfully advises and resolves cases of misinformation of foreign workers.

As mentioned in Chapter 1, Fair Mobility organises awareness-raising campaigns in strategic places, aiming to reach the most vulnerable workers, who are generally difficult to meet. Fair Mobility successfully reaches them, since workers who make use of Fair Mobility services come from industries that are generally considered vulnerable and at high risk. According to Fair Mobility's data (Figure 1), in 2022 more than half of the workers who access its services are employees in industries considered at high risk: construction, transport, logistics, contract cleaning services and the meat sector. This trend has been steady since 2020.

Figure 1: Percentages of foreign workers who required counselling services from Fair Mobility by economic sector of origin, 2022



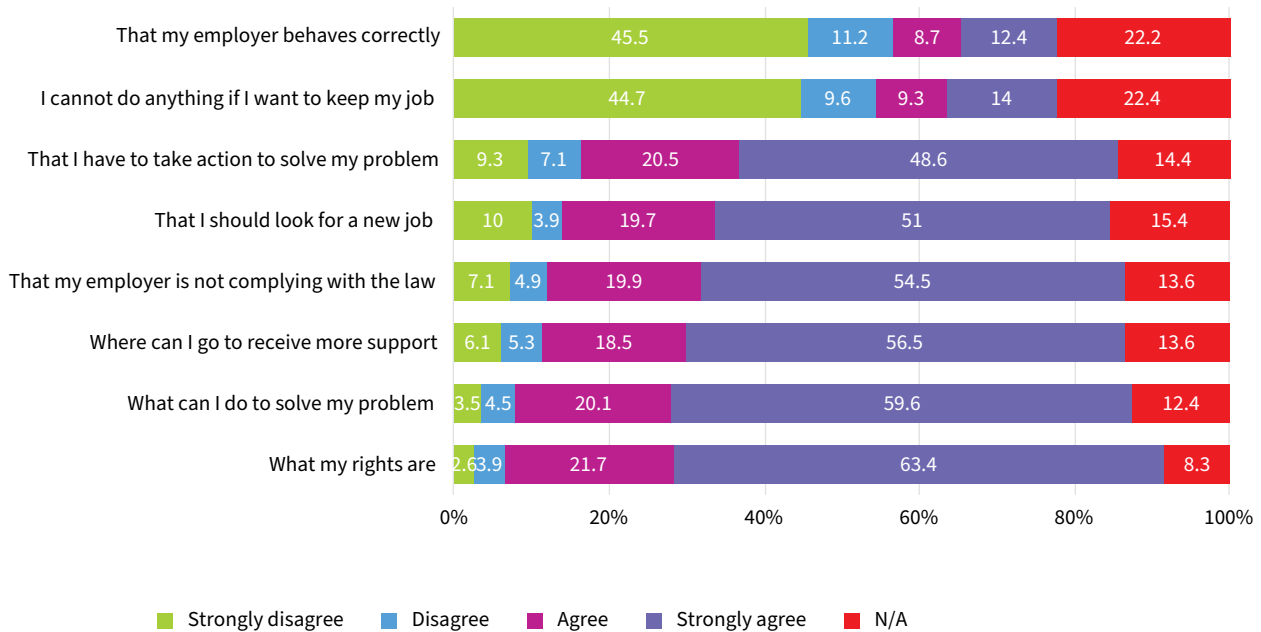
Source: Authors' translation from *Faire Mobilität*, 2022

Fair Mobility's success in empowering workers has been assessed by the BMAS, which confirms the effectiveness of Fair Mobility in spreading legal and useful knowledge for foreign workers. Respondents to the ministry's survey

(Figure 2) confirm that through Fair Mobility services they are aware what their rights are (63.4% of respondents) and what they can do to resolve their issues (59.6%).

Figure 2: Immediate benefits of Fair Mobility's counselling for workers who received advice, 2020 (%)

I realise ...



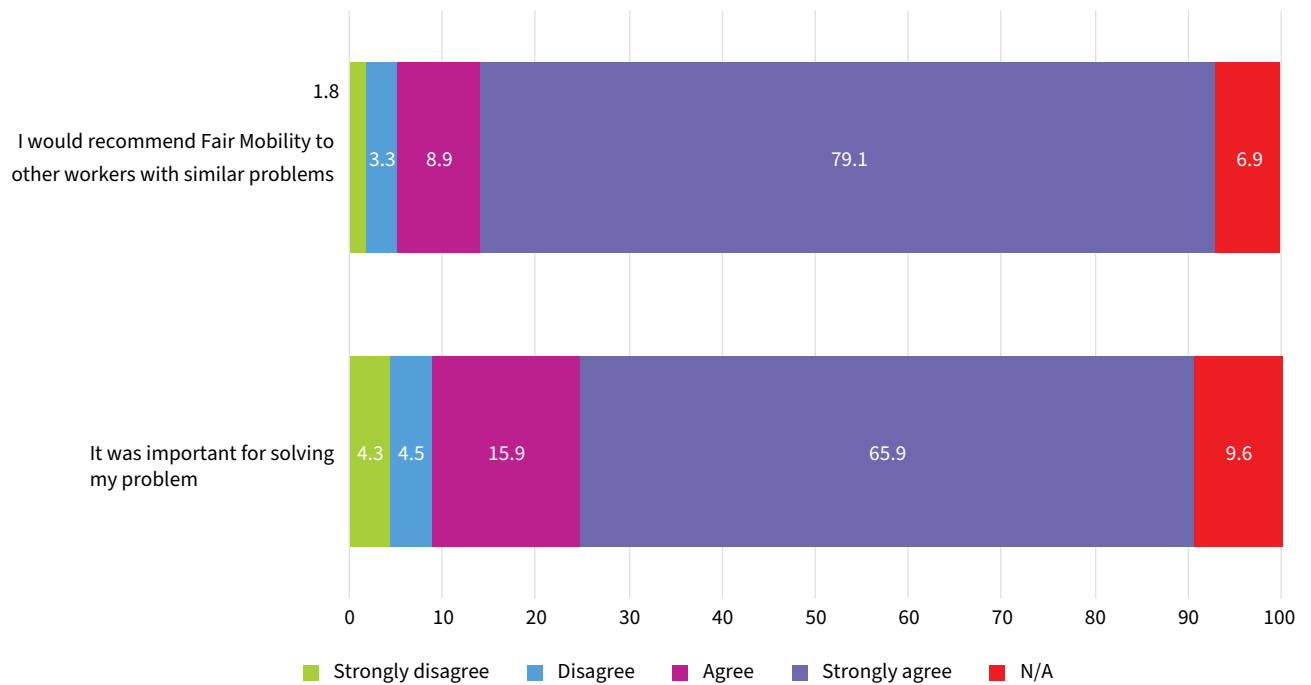
Note: N/A, not available.

Source: Authors' translation from *BMAS*, 2020

The same assessment by the BMAS confirms that the advisory service is appreciated by foreign workers. Respondents to the survey released by the ministry (Figure 3) rated the support provided by Fair Mobility as very important and almost 90% would recommend it. Only

a small proportion of the respondents declared that they would not recommend its services because their problems were not solved or they expected counsellors to do more or dedicate more time to them (Figure 4).

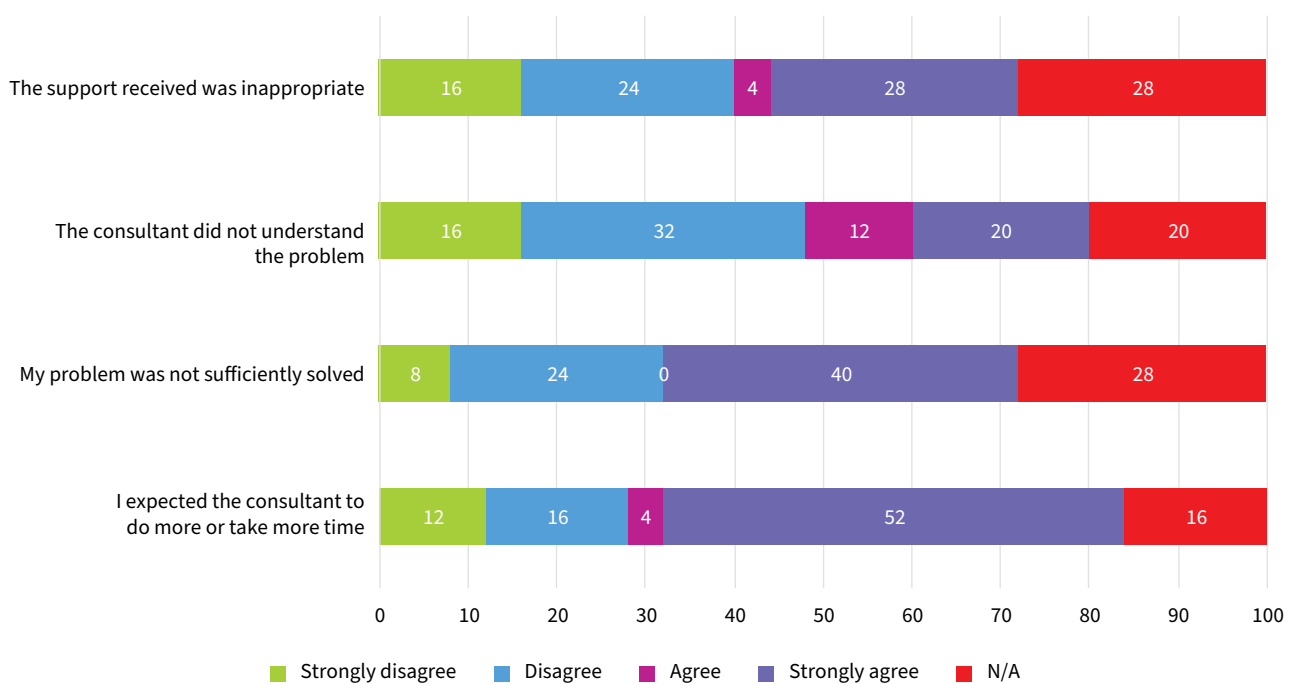
Figure 3: Evaluation of Fair Mobility support services by foreign workers, 2020 (%)



Note: N/A, not available.

Source: Authors' translation from BMAS, 2020

Figure 4: Reasons for the negative evaluation of the project by foreign workers, 2020 (%)



Note: N/A, not available.

Source: Authors' translation from BMAS, 2020

BUAK in Austria

Other measures that provide initiatives to empower workers and increase their trust through similar approaches are sector-specific. By offering informative and advisory services in foreign languages too, the construction industry initiatives in the case studies have led workers to trust institutions.

BUAK aims to achieve a relationship based on trust and acceptance with both employers and workers. According to recent data (Haidinger and Papouschek, 2021), in 2018 approximately 17,000 workers requested personal advice in the customer centre, while around 20,000 received information by email. Likewise, through the Posting of Workers Platform, mentioned in Chapter 1, BUAK has received thousands of requests for information by email (Haidinger, 2018b). The platform is mostly accessed by employers requesting information about posting. Being a paritarian institution, BUAK is able to encourage both employees and employers to contact it when they need help, embracing a soft and delicate approach aiming to increase trust on the part of both workers and employers. Evidence of this is employers' acceptance of BUAK's checks; they see the institution not only as an inspection authority but also as a social partner institution servicing its clients, who are both employers and workers. During checks, BUAK's inspectors make significant efforts to establish a relationship of trust with posted workers. While generally labour inspectorates identify language barriers as one of the main problems when inspecting sites, BUAK inspectors say that they are able to communicate with workers in 98% of cases involving construction companies (Kahlert and Danaj, 2021). Access to several languages allows inspectors to increase the willingness of workers to provide correct information and, thus, to increase the quality of BUAK's inspections.

Fair Play Bygg in Sweden

Fair Play Bygg in Sweden represents another example of an initiative that empowers workers. It was launched with the ultimate goal of allowing workers and non-workers to report illegal activities in the Swedish construction sector, empowering workers by providing them with a platform to report anonymously. Since its launch in 2016, Fair Play Bygg has achieved important outcomes, receiving over 1,500 tips about suspected crime on construction sites in the Stockholm area. Of those cases, 868 have been reported to the authorities, who have fined 149 companies a total of SEK 103.72 million. Most notably, the evidence collected by Fair Play Bygg reveals a disregard not only for labour laws and regulations but also for human basic rights. Frequently, there are also connections to serious criminal networks with large and well-hidden organisations behind them based in other countries. Fair Play Bygg, therefore, successfully identifies cases that go beyond the scope of working conditions, identifying other types of exploitation and crimes to which the industry is vulnerable and that Fair Play Bygg attempts to counter.

Trade unions' awareness-raising initiatives in Italy

Agricultural workers are difficult to reach because their workplaces are often hard to access and they often do not speak the local language. As seen in Chapter 1, some Italian trade unions have therefore launched an initiative that allows them to reach workers in their workplaces or in meeting places, using vans, over the whole national territory. Similarly, digital tools such as the online app WEFAL are available to collect reports from vulnerable workers. The high prevalence of irregularity in the industry makes it difficult for trade unions to cover all workers in the sector, but stakeholders interviewed in the related case studies considered that the information campaigns and supportive translated material were a significant starting point to share useful information. Informative activities by authorities or social partners combined with peer-to-peer spreading of knowledge among workers were considered to be crucial in helping authorities reach larger percentages of workers in the most vulnerable industries. They also enhanced workers' trust and increased their useful legal knowledge.

Increased public attention

While in some cases authorities are able to increase compliance by targeting awareness-raising measures at (vulnerable) workers, other policies aim for a different intermediate outcome to ultimately reach compliance. This is the case with policy measures aimed at reaching non-compliant employers by increasing public attention to the issue. This strategy appears to have a greater impact on big companies, which tend to avoid publicity and attention to their activities. Thus, by launching initiatives that trigger naming and shaming (as seen in Chapter 3), authorities are able to increase public attention, which, in turn, leads to more compliance or greater concern for workers' employment conditions. This outcome is successfully reached through the Occupational Safety and Health Inspection Act and SOKA-BAU (Germany), the WAS (Netherlands), the Responsible Employer Programme (Slovakia), and trade unions' and local authorities' cooperation agreements (Italy).

Occupational Safety and Health Inspection Act in Germany

The German Occupational Safety and Health Inspection Act represents a remarkable example in which authorities are able to indirectly improve workers' conditions by increasing public attention to the meat industry. As seen in Chapter 3, in 2020 the impact of the pandemic and the new legislation triggered massive attention to the German meat sector. That led public exposure to become one of the main 'weapons' to achieve policy solutions for the precarious working conditions in the industry. Since the implementation of the act, companies have got in touch with trade unions to negotiate new collective agreements. Among the main outcomes achieved are the following.

- Collective agreements have been negotiated in the slaughtering and cutting areas, in which most labour violations take place. One example is a nationwide

collective agreement negotiated in 2021 with some companies, which envisages a new agreement on all workers' pay, involving more than 10,000 employees in the meat industry.

- Another significant step in favour of trade unions in the meat industry is the works council elections in 2022. Before the act, works councils in a few meat companies were constituted by the permanent workforce of the company. Under a new cooperative environment for labour relations, a large number of former contract employees were now entitled to vote for the first time, bringing about significant opportunities to improve working conditions.
- With the new legislation, negotiations on minimum wages started between companies and trade unions in the meat industry. Social partners reached a collective agreement on a new minimum wage in 2021, which, after a few months, was declared generally binding. This represented a major decision in the industry, as, even if since 2014 meat workers had been supposedly earning the statutory minimum wage, subcontractors were always able to find ways to pay below it (MAGS, 2019). Furthermore, the hourly wage of meat workers

was significantly below that in other industries. With the new industry-wide collective agreement, the minimum wage was established at €10.80 per hour, which gradually increases in different agreed stages until 2024, when the terms of the agreement will come to an end (Figure 5). After that, the sector is expected to renegotiate the terms of the agreement on minimum wages.

All these new arrangements were not part of the legislation, since constitutionally the act does not cover payments and working conditions. The new legislation, therefore, started an innovative movement inside the sector that helps social partners gain new ground and increase public attention to the matter. An illustration of this is the strong position that the European Federation of Food, Agriculture and Tourism Trade Unions adopted in the European arena through its '10 demands for action at EU level' (EFFAT, 2020), which coincided with the adoption of the act in Germany. Furthermore, the European Labour Authority has been carrying out cross-border inspections, and in 2022 supported inspections of meat workers in the meat industry involving offices from Germany, the Netherlands and Romania (ELA, 2022).

Figure 5: Collective bargaining in the meat industry – statutory minimum wages, employers' proposals and results of negotiations for an industry minimum wage (€ per hour)



- Negotiation results (27 May 2021)
- Employers' proposals (29 March 2021)
- Employers' proposals (16 March 2021)
- Statutory minimum wage

Source: WSI (2021)

Sham Constructions Law in the Netherlands

Through the mechanism of naming and shaming, the WAS in the Netherlands is able to achieve similar results. As mentioned in Chapter 1, the WAS introduced the publication of inspection data, which does not directly prevent non-compliance with minimum wages, since its functioning depends considerably on public exposure. However, in just the first year after its introduction, the Dutch inspectorate's website on inspections carried out published the results of 1,180 inspections, which, in a couple of months, were seen 449 times by 242 visitors, while the final annual monitoring of the WAS (Eerste Kamer der Staten-Generaal, 2019) highlighted the constant increase in both the number of inspections published and public attention, reaching in the first three years of implementation 4,196 companies inspected, 1,454 fines and 15,000 visits to the website.

Social partners from different sectors consider that this approach works well in the construction and temporary agency work sectors. In particular, large companies do not want to be exposed to the media and be taken to court. This was also evident before the implementation of the law, since major players were against it because it could expose them to public scrutiny and to be target of negative public opinion. Furthermore, the publication of inspection data has a significant impact on subcontracting, leading chain partners to carefully choose companies with which to collaborate (SEO Economisch Onderzoek, 2019). Such choices, in turn, are evidently also influenced by the liability introduced by the WAS. Therefore, a change of behaviour on the part of employers in large companies has been perceived. Published inspection data have proved to have negative consequences for companies that commit infringements, among which the most important seem to be damage to their public image, loss of customers, and additional costs and effort needed to recruit and retain staff. The Netherlands Trade Union Confederation estimates that, since the entry into force of the WAS, approximately €3.5 million in unpaid wages has been recovered through settlements, without the need to involve a court. This outcome demonstrates the success of the corrective approach that both naming and shaming and chain liability imply (Eerste Kamer der Staten-Generaal, 2019).

SOKA-BAU in Germany

Like the WAS, the activities introduced by SOKA-BAU in the construction sector in Germany have also triggered attention to carefully choosing companies. The award certificate mentioned in Chapter 3, concerning the practice of naming and shaming, leads social partners to increase attention to contractors and subcontractors that are not compliant, since they are not able to obtain the award certificate granted by SOKA-BAU and, therefore, are liable to chain liability. It has been confirmed that SOKA-BAU has successfully used the liability provisions when claiming holiday contributions from contractors, by directing public attention to the matter. Serious cases concerning liability have been brought before the Federal Labour Court and have been successfully concluded in favour of SOKA-BAU

(see Federal Labour Court, 2012). Even if this pressure mechanism proves to have effective results, its functioning depends greatly on the availability of information concerning contractors and subcontractors. Due to the complex chains that develop in the construction industry, it is not always easy to identify all the parts of the chains. Indeed, one of the main channels for posting companies to bypass compulsory declarations is the flexibility that they can achieve with documentation. Therefore, there can be differential effects depending on the availability of information concerning posting declarations.

Aware of this shortcoming, SOKA-BAU has provided balance by developing a mechanism to warn of foreclosure procedures. Through foreclosure, SOKA-BAU has the ability to sue foreign employers if necessary. Therefore, the joint body sends SOKA-BAU's workers, who could even be hired in the foreign country, to pursue the reports against non-compliant employers. This is possible since collective agreements in the construction industry are applicable generally, and therefore include posted employers in Germany. SOKA-BAU, then, has the ability to sue them first at the court in Wiesbaden (where the headquarters of SOKA-BAU are), and then having obtained authorisation it goes to the foreign country. The number of cases brought before the Federal Labour Court shows the outstanding importance of SOKA-BAU; between 2004 and 2017, of the 39 Federal Labour Court cases with transnational implications (posting), 35 were brought by or against SOKA-BAU, while, of the 83 decisions concerning posted workers and transnational implementation decided by regional labour courts, 64 were brought by or against SOKA-BAU (Fechner, 2020). Therefore, being aware that SOKA-BAU could be entitled to pursue non-compliance cases in foreign countries too, attracting public attention, posting employers are fearful of not complying.

Responsible Employer Programme in Slovakia

The Responsible Employer Programme in Slovakia takes a similar approach of raising attention through awards. As mentioned in Chapter 1, the initiative draws employers' attention to aiming to obtain recognition. To date, five large companies, of which some operate worldwide, have been interested in obtaining the certificate, enhancing their public reputation. As more companies become aware of the benefits of the Responsible Employer Programme, it is likely that the initiative will gain momentum and attract more participants. This emphasises the potential of the intervention to have a meaningful impact in promoting responsible business practices across a wider range of organisations. Employers may not always have a strong incentive to comply with labour and employment law regulations. In this regard, obtaining the Responsible Employer certificate may enhance the reputation of employers and showcase their commitment to upholding ethical and legal standards. By complying with the requirements and achieving such accreditation, employers may also attract more workers, consumers and investors who appreciate responsible business practices and fair working conditions.

Trade unions' and local authorities' cooperation agreements in Italy

Likewise in Italy, trade unions' and local authorities' cooperation agreements, according to the interviewees, stimulate the debate on the need for regulations and protections for platform workers. They represent first attempts to introduce a legal framework to support the possibility of introducing a minimum set of protections and to regulate the contractual position of food delivery workers. Hence, the trade unions' and local authorities' cooperation agreements play a part in drawing policymakers' attention to the need to legally protect platform workers, and in triggering important mechanisms that improve labour conditions for platform workers.

Lower administrative burden

Case study analysis shows that reducing the administrative burden is an intermediate outcome that helps labour authorities to efficiently achieve compliance with minimum wages. By reducing documentation, authorities quickly obtain an overview of the most at-risk sectors and workers and can efficiently direct their attention, saving time and both human and financial resources. This intermediate outcome is achieved mostly in the campaign to combat non-compliance in the domestic work sector (Spain), the ITSS Mailbox (Spain), the Warned to Choose campaign (Lithuania), the identification code (Italy), Dimona and Limosa (Belgium), and ISHAP (Austria).

Campaign to combat non-compliance in the domestic work sector in Spain

The campaign to combat non-compliance in the domestic work sector in Spain is an example of how authorities successfully achieve a lower administrative burden

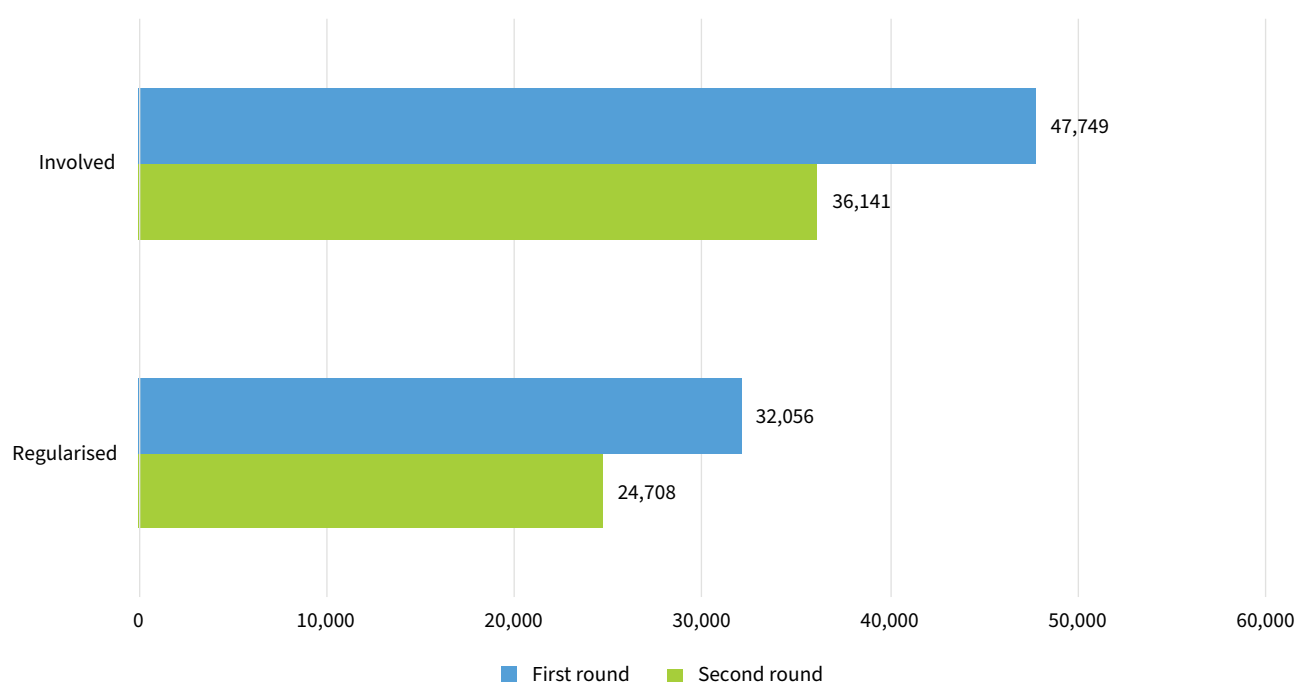
by coordinating and developing fast-track procedures with letters delivered to non-compliant employers (householders). The mass sending of letters as part of the campaign has enabled the labour inspectorate to identify those employers who have regularly hired domestic workers but have not updated their minimum wages during the last few years. In 2021, during the first year of the campaign, 45,019 letters were sent to regularise 47,749 workers in the domestic work sector, of whom 67.13% were voluntarily regularised by their employers. The second round started in January 2022, and it achieved a success rate of 68% (Figure 6).

Through the mass sending of letters in the 2021 round, the increase in contribution bases amounted to €21,175,714.94, while there was an estimated growth in wages of €83,023,043.88. Furthermore, 2,531 fixed-term contracts were transformed into indefinite ones.

ITSS Mailbox in Spain

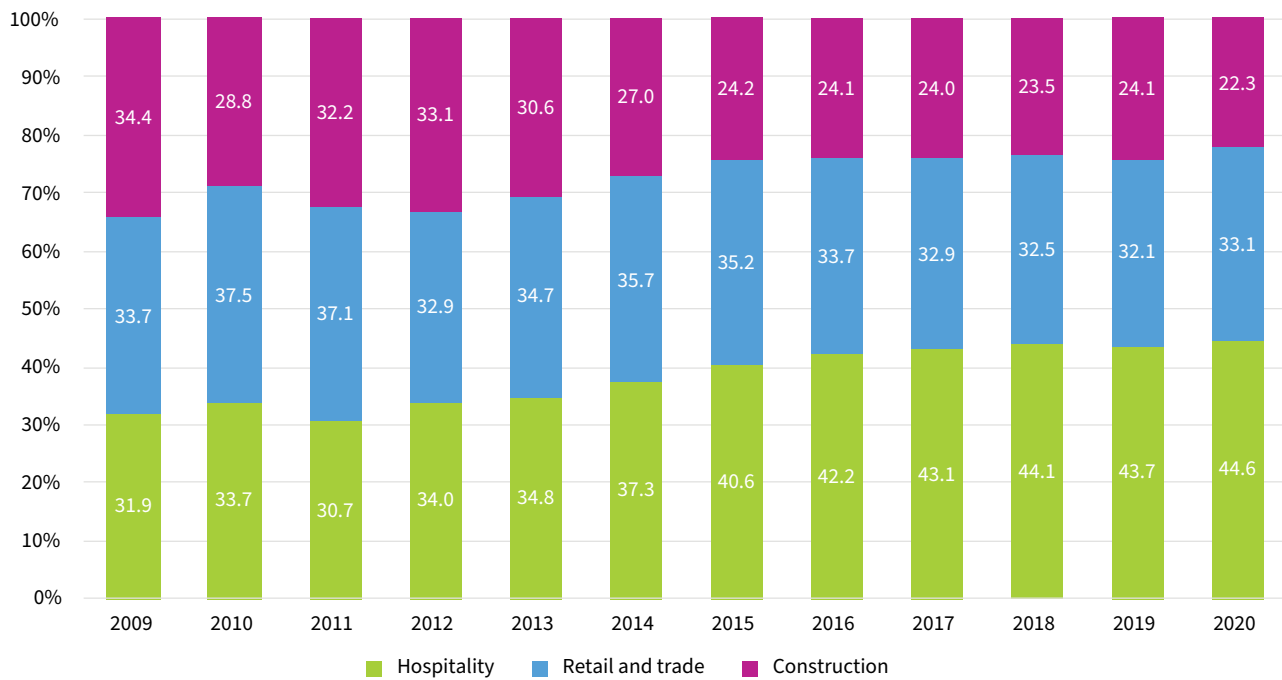
The Spanish ITSS Mailbox also provides fast-track administrative and classification procedures allowing the national inspectorate to simplify its role. The effectiveness of this approach has been demonstrated by national authorities through the high number of irregular practices that have been uncovered in different areas and vulnerable sectors. Since the introduction of the mailbox in 2013, inspection actions have been gradually increasing in the hospitality sector (Figure 7). The Spanish economy depends to a great extent on this economic activity, which provides employment to nearly 2.2 million people. In comparison with the construction and retail and trade sectors, and all other economic activities in Spain, hospitality is the sector most at risk of anonymous complaints submitted through the mailbox (Figure 8).

Figure 6: Numbers of workers involved in and regularised through the campaign, 2021–2022



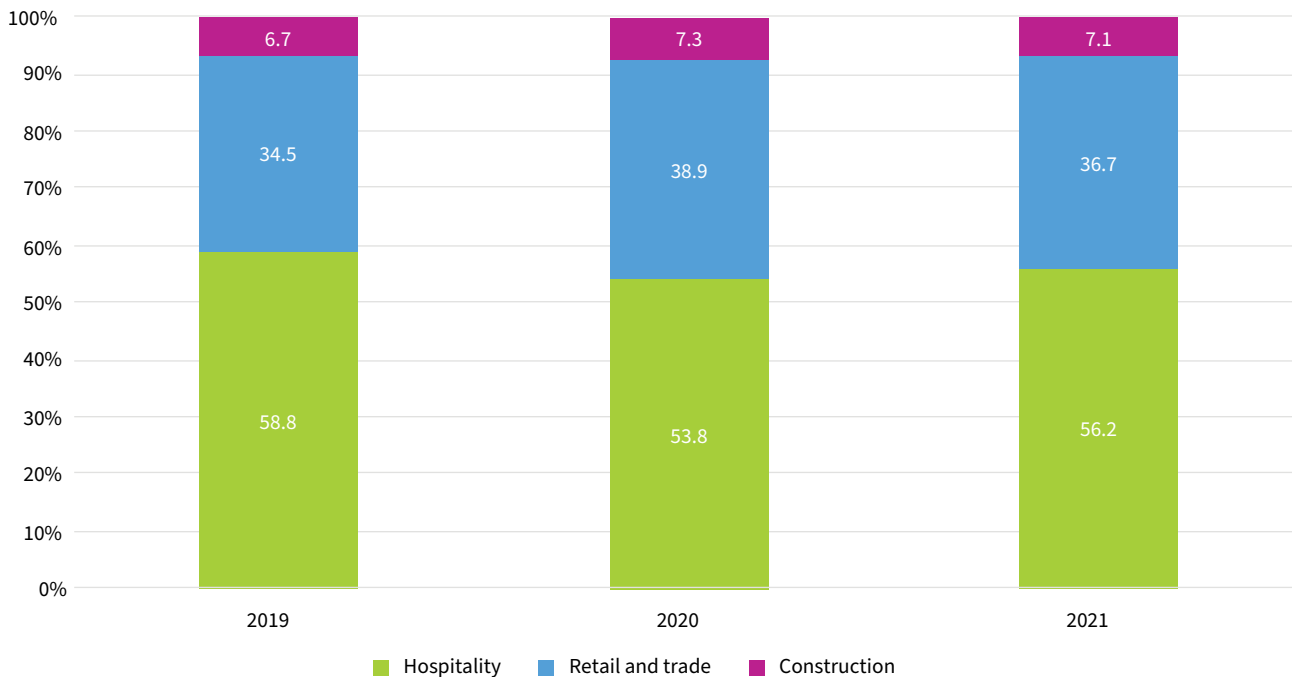
Source: Authors' calculations based on ITSS data

Figure 7: Trend in the labour inspectorate’s activities in the most vulnerable economic sectors, by year (%)



Source: Authors’ calculations based on ITSS data

Figure 8: Trend in the labour inspectorate’s activities in the most vulnerable economic sectors through the ITSS Mailbox, by year (%)

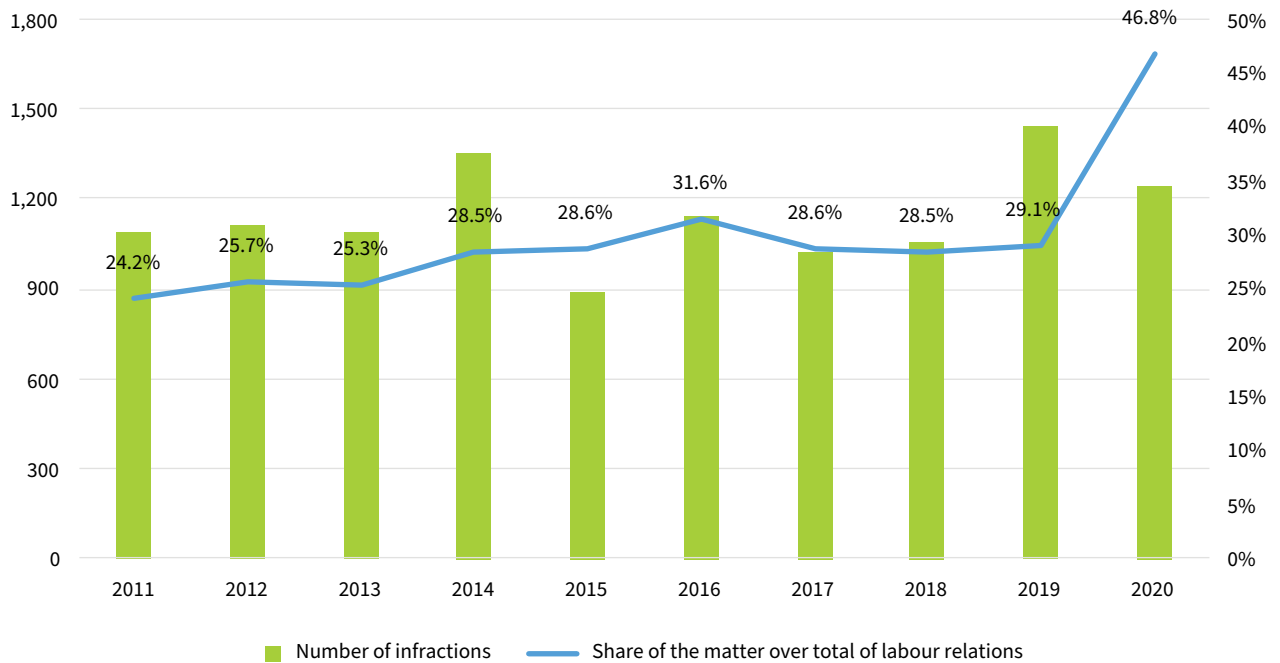


Source: Authors’ calculations based on ITSS data

Most of the inspectorate’s activity is focused on social security matters, the main socioeconomic issue in the country due to the high percentage of undeclared work, temporary contracts and false self-employment. However, it classes the regulation of wages as labour relations. Since the introduction of the ITSS Mailbox in 2013, the

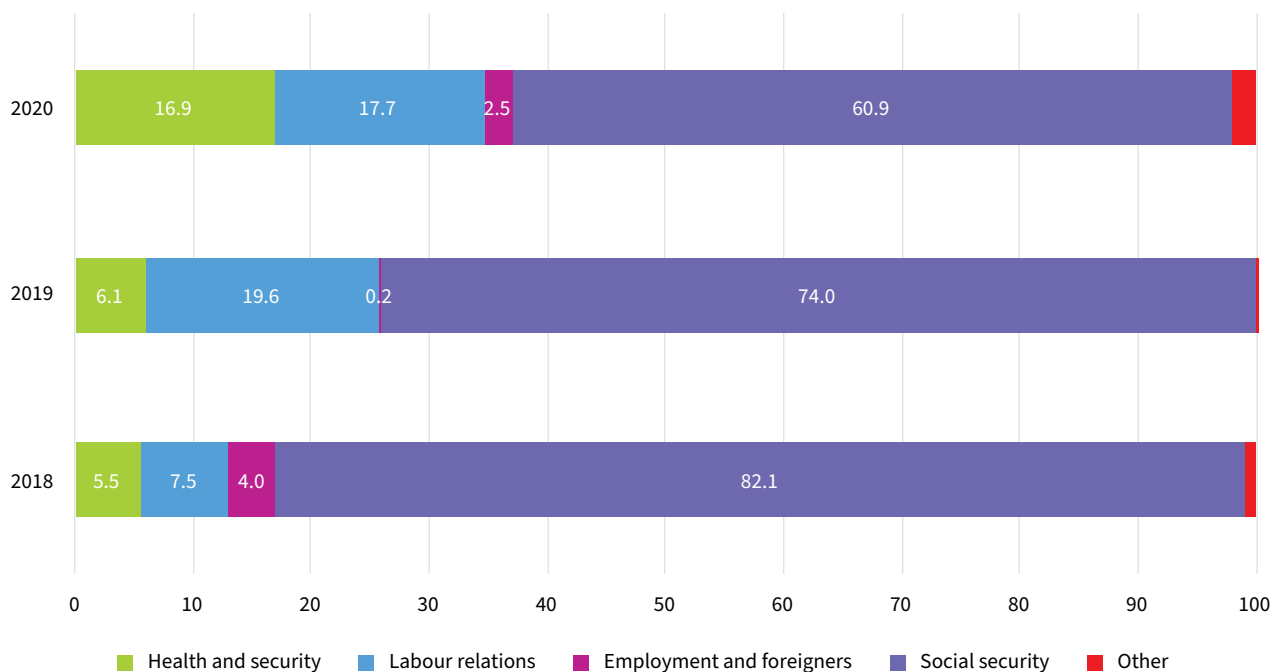
ITSS’s activity in this field has been moderately increasing, particularly since 2018 (Figure 9). Experts agree that non-compliance with minimum wages, even if significant, does not represent most breaches of the country’s labour laws.. Since 2018, through the mailbox, workers’ complaints have followed the same order of priorities (Figure 10).

Figure 9: Trends in the labour inspectorate’s activities concerning compliance with minimum wages, by year (number and %)



Source: Authors’ calculations based on ITSS data

Figure 10: ITSS actions through the mailbox, by field (%)



Source: Authors’ calculations based on ITSS data

Warned to Choose campaign in Lithuania

Like the campaign in the domestic work sector in Spain, the Warned to Choose campaign in Lithuania lowers authorities’ administrative burden through the comparison of different authorities’ databases, as seen in Chapter 1. After just the first year of the implementation

of the initiative, in 2016, non-compliance with regulations related to the recording of working hours and the payment of wages was identified in more than 6,000 companies, where there were more than 300 workers in precarious working conditions, and fines were imposed of more than €60,000. Comparing the cases of non-compliance, the share of employees receiving minimum or lower monthly

wages at the end of 2016 decreased by 8.3 percentage points compared with the beginning of the campaign, and the average wage in the third quarter of 2016 increased by approximately 9.6% compared with the first quarter of 2016. In addition, personal income tax collected during 2016 increased by 12.4% compared with 2015. In companies where the Warned to Choose model was applied, the percentage of employees paid minimum or lower wages decreased by around 15 percentage points.

Identification code in Italy

The Italian identification code represents one of the most important efforts developed by the National Council of Economy and Labour together with the INPS. By creating a unique database that makes it possible to collect the main relevant information on collective agreements in a single place, it makes it easier to track the coverage of each collective agreement and, in general, to identify the most representative agreements. In this way public administrations can quickly trace the collective agreement by which the employer is bound and, therefore, identify potential irregularities, dumping and bogus agreements.

Dimona and Limosa in Belgium

In Belgium, national authorities use digital fast-track procedures that allow both employers and authorities to reduce the administrative and bureaucratic burden.

This is the case with Dimona and Limosa data, which, as mentioned in Chapter 1, are used to quickly identify workers, to establish the links between workers and employers in a clear manner, and to grant social benefits to workers. Through the use of Dimona and Limosa, authorities are

able to verify if there is compliance with working conditions. Both electronic registrations provide indicators that save authorities and employers time, make their procedures less bureaucratic and make it possible to shed light on potential cases of non-compliance. Thus the authorities obtain a more detailed picture of at-risk cases and ultimately are more likely to identify non-compliance and irregular practices.

The easy and quick accessibility of the declarations is one of their strongest advantages; they prove to be very effective because they are easy to use and have immediate effect (Broeck, undated). As it is easy to comply, employers rarely fail to register declarations, since they are well aware of the heavy criminal sanctions that follow on non-compliance. According to Article 181 of the Social Penal Code, failure to declare is heavily penalised. In particular, if employers fail to complete the electronic declarations they will face the fourth level of sanctions.⁶⁹ This is confirmed by the data, which highlight the high number of Limosa declarations (for foreign and/or posted workers) registered through the years, with the highest number in 2019 (824,400). Only a few missing Limosa declarations have been detected compared with the overall number of digital registrations received by authorities (Table 1).

Furthermore, the Belgian authorities identify through their inspections a low number of infringements of the Limosa regulation, meaning that, overall, it is correctly fulfilled by employers (Table 2). Therefore, Belgian authorities have confirmed that the Dimona and Limosa system allows them to have more efficient control of documentation for inspections.

Table 1: Numbers of Limosa declarations registered and missing, 2018–8 April 2023

Year	Number of Limosa declarations registered	Number of Limosa declarations missing
2018	792,254	625
2019	824,400	477
2020	762,300	268
2021	817,738	191
2022	806,638	186
2023	150,406	20

Source: Authors' calculations based on Social Intelligence and Investigation Service data

Table 2: Numbers of infringements of the Limosa regulation detected during inspections, 2019–2021

Year	Number of inspections	Infringements for posted workers	Infringements for self-employed	Total infringements	Infringement rate (%)
2019	14,658	93	60	153	1.00
2020	10,080	105	57	162	1.60
2021	15,174	118	57	175	1.20

Source: *Wispelaere et al, 2022*

⁶⁹ Articles 181 (for Dimona) and 182 (for Limosa) of the Belgian Social Penal Code declare that the sanction level provided for failure of both declarations is 4. Level 4 consists of either a six-month to three-year imprisonment and a criminal fine of €600 to €6,000, or only one of these penalties, or an administrative fine of €300 to €3,000. Amounts increase by the number of workers concerned. Furthermore, for a posted self-employed worker, the penalty is level 3.

ISHAP system in Austria

Finally, the Austrian initiative ISHAP allows authorities to save time when planning inspections in the construction industry. Even though it is a private initiative, ISHAP has many interfaces with Austrian authorities such as the ÖGK, a social security institution that carries out inspections in cases of domestic workers in the country; the Federal Ministry of Finance's bogus company database; the Austrian trade directory; and other relevant authorities in the country. As well as reducing the administrative burden on employers, this facilitates authorities' inspections, since they can easily track workers in the construction industry. The ISHAPCard was designed with these goals in mind, providing easy data access, editing and management, as well as centralised monitoring with notifications. Only two years after the ISHAP system was set up in 2008, 20,000 ID cards had been released by general contractors in Austria for their workers, confirming that they are easy to use and help to save valuable time (Evolis, 2010). This, in turn, supports compliance with labour conditions, since employers can easily track their workers, allowing a higher level of enforcement of regulatory compliance. ISHAP directors confirm that the authorities also benefit from this system, gaining easy and efficient access to documents in cases of inspections.

Increased cooperation among relevant stakeholders in compliance

Increased cooperation is seen by authorities and relevant stakeholders as a positive outcome that achieves more effectiveness in inspections and targeted approaches. While some measures specifically aim to achieve this cooperation by creating teams of different stakeholders or specific legislation on the matter (intervention teams and WAS), other initiatives indirectly increase it through activities stipulated by the policy measure (see Chapter 3, section 'Exchange of information and coordination of different stakeholders') that favour increased collaboration (State Control Unit for Labour Clauses, Internal Response Team against Social Dumping, BUAK and SOKA-BAU).

Intervention teams in the Netherlands

Increased cooperation is one of the leading principles of the intervention teams, through which stakeholders involved are able to obtain a good insight into the current working conditions in highly at-risk areas and sectors by working together and joining forces. For this purpose, the exchange of powers set out by the measure is essential. Partners involved in the intervention teams share powers, allowing them to see the whole picture of the challenge that is being addressed, with all partners bringing their expertise. Indeed, one of the main goals of the projects is to get an overview of how the chain of employment, working conditions and housing works, which organisations are involved and how they are related to each other in the chain. An approach integrating different actors and institutions allows them to act more effectively and efficiently, delivering tailored approaches at case level. This is demonstrated by the

type of inspections carried out by the intervention teams since their creation: in 2007, one of the first intervention teams acted in the agricultural sector and, in particular, on mushroom-growing farms. The Dutch inspectorate, as the leading partner, was able to inspect 98 companies and 10 temporary agencies, in which severe forms of exploitation of employees were found. While the first wave of inspections ended in 2009, after five years the intervention team was still active and carrying out inspections in the sector. Through this approach, the LSI adds to the already embedded context of collaboration a strong partnership among municipalities and governmental organisations. Such cooperation did not exist before the creation of the intervention teams, which, through established coordination, bring added value compared with an individual approach by each partner, and thus increase the effectiveness of controls. This is confirmed by interviewees, who consider the intervention teams a means to increase collaboration among relevant stakeholders in the field of compliance.

Sham Constructions Law in the Netherlands

The WAS was introduced in a context characterised by a high level of cooperation among national authorities but a low level of collaboration and exchange of information between social partners and national authorities. As seen in Chapter 1, the WAS introduces exchange of information between the labour inspectorate and social partners; collectively agreed wages are enforced through communication among the Dutch authorities and social partners, leading to a stronger and better relationship. However, there are different opinions concerning this outcome. In the temporary agency work sector, this measure seems to work; social partners say that before the WAS there was no exchange of information at all, so they had to investigate non-compliance through other sources. Since the implementation of the law, employer organisations and employee associations receive information at least every month concerning possible cases of non-compliance with wages. In the construction sector, on the other hand, there still exists a 'wall' between the labour inspectorate and the social partners, which receive very limited information, despite the fact that the construction sector is at high risk of non-compliance. Furthermore, the social partners report that the information that they do receive often arrives late, making it very difficult for them to further investigate cases reported by authorities, since most projects in the construction sector last a few months.

State Control Unit for Labour Clauses in Denmark

As mentioned in Chapter 1, the State Control Unit for Labour Clauses oversees work clauses in contracts where different state agencies are involved. In doing so, the Control Unit meets with suppliers, sub-suppliers and the state institutions, which, in the event of breaches, determine which sanctions are applied to the supplier. State institutions, therefore, can enforce any non-compliance powers against the suppliers, collaborating with the State Control Unit to identify and penalise non-compliant suppliers. In doing so, the case study confirms

that inspections represent a significant tool for supervising compliance and have led to reinforced cooperation among institutions. In 2021, the control unit carried out 88 inspections, distributed roughly evenly across four agencies (Figure 11).

Internal Response Team against Social Dumping in Denmark

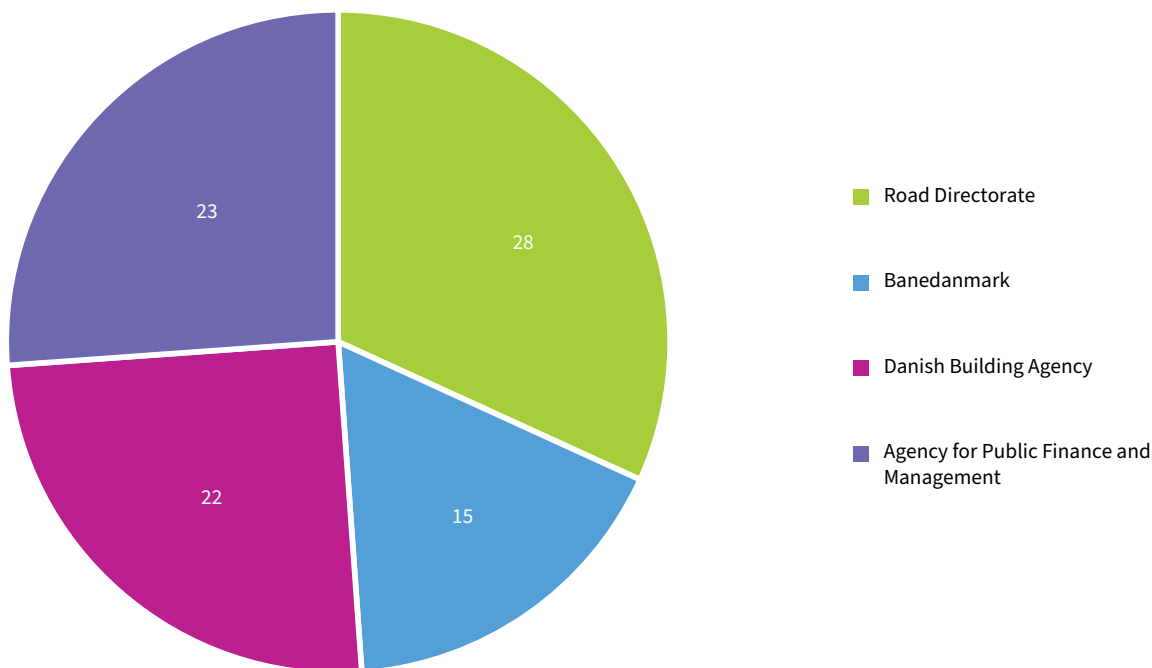
The Danish case study on the Internal Response Team against Social Dumping confirms that strengthened collaboration among institutions and stakeholders is a result of the procedures carried out by the internal response team when enforcing working conditions and minimum wages. The internal response team is composed of the municipality, suppliers and employees, considering all of them partners on the same footing. This collaborative framework allowed the team to carry out 664 checks in 2020. In one in four inspection visits, an audit of pay and working conditions checks was

conducted. Violations were found in 84% of these cases. In 2020, a demand was made for subsequent payments to employees of DKK 1.75 million.

BUAK in Austria

Increased cooperation in the construction industry takes place in Austria by means of BUAK through an exchange of information among social partners and national authorities, mentioned in Chapter 3. This increased cooperation has ultimately led to an increase in the quality of BUAK’s inspections. The high quality of BUAK’s inspections is demonstrated by BUAK’s notifications of irregular practices of employers concerning wage dumping, which have led authorities to adopt several legal decisions against those employers concerning underpayment. The number of notifications from BUAK has gradually increased through the years, with a significant peak during the first year of the COVID-19 pandemic (Figure 12).

Figure 11: Number of inspections per agency involved, 2021

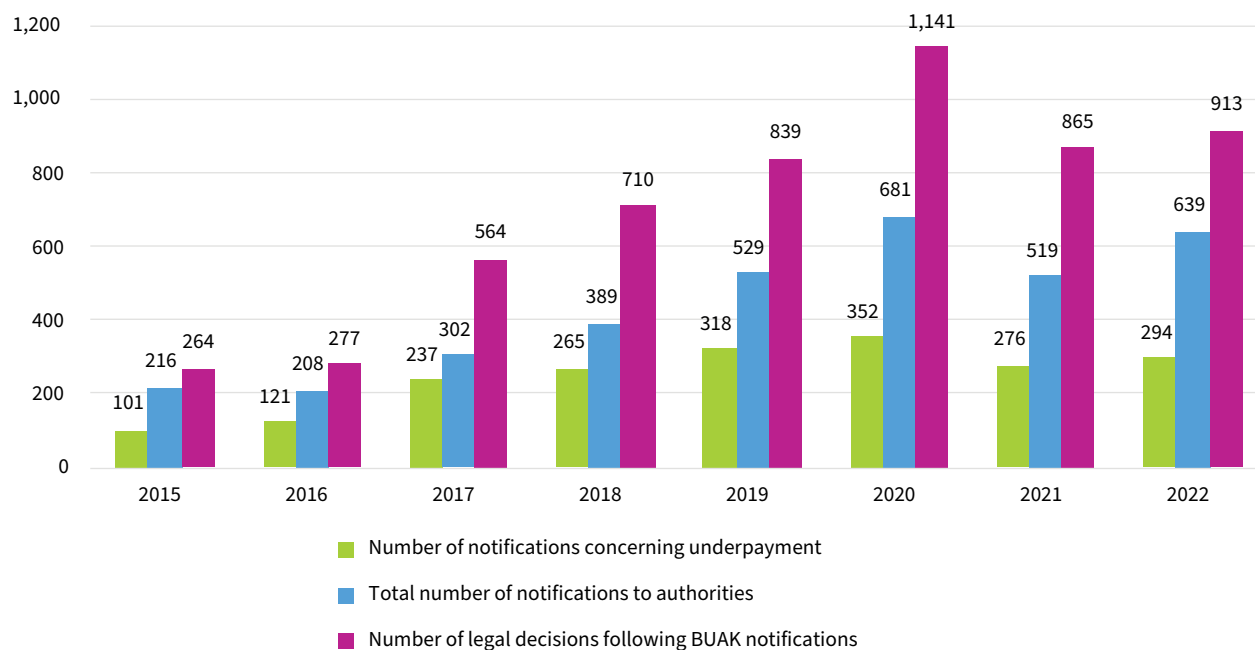


Source: Vejdirektoratet, 2021

Furthermore, almost all of BUAK’s notifications concern wages and the obstruction of wage audits (Figure 13). Some cases of verified underpayment do not end in notifications to authorities if the case is not severe,

meaning if underpayment is low. In this case, BUAK has the authority to require the employer to pay the difference in remuneration as arrears.

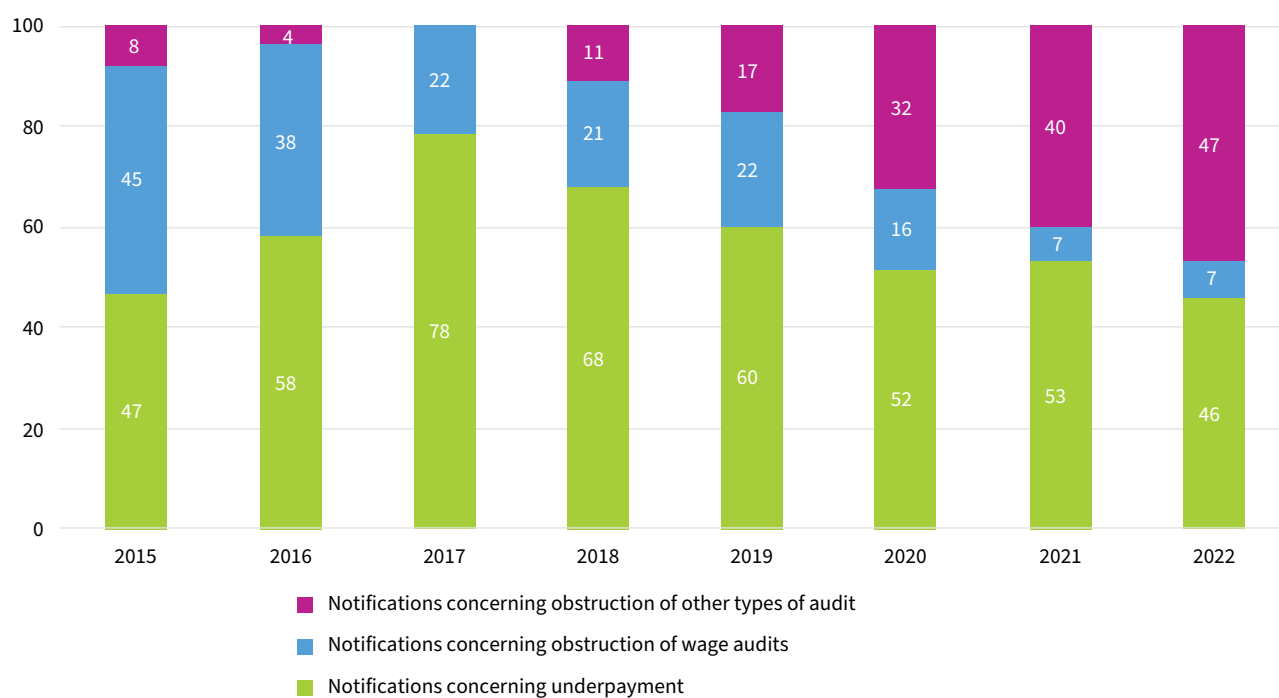
Figure 12: BUAK’s notifications to labour authorities, 2015–2022



Note: The total number of notifications to authorities includes notifications concerning underpayment, obstruction of wage audits and obstruction of other types of audits.

Source: Authors’ calculations based on BUAK data

Figure 13: Types of BUAK notifications about wage dumping, 2015–2022 (%)



Source: Authors’ calculations based on BUAK data

SOKA-BAU in Germany

In the case of SOKA-BAU, a network of cooperation against undeclared work and illegal employment in the construction industry has developed, encompassing SOKA-BAU, federal authorities and joint European bodies. Besides the customs authority, other key federal stakeholders in SOKA-BAU include the Federal Employment Agency, the German Statutory Pension Insurance and similar funds in other German industries. There is also solid cooperation with comparable funds

elsewhere in Europe, particularly in Belgium, Denmark, France and Italy, and the state authority in Austria. This partnership proved to be outstanding during the COVID-19 pandemic. Through the European Market Environment in the Construction Sector project, co-funded by the European Commission, SOKA-BAU together with the other European partners in the project and relevant stakeholders in the construction sector exchanged information and ideas on how to better enforce the working conditions of posted workers across the European Union.⁷⁰

⁷⁰ The project aims to understand how posted workers in the construction sector have been affected by the measures introduced by Member States during the COVID-19 pandemic (see EMEcs, undated).

5 Lessons learned: What has worked and for whom

The comparative analysis of the 21 case studies through the realist approach underlines specific patterns that arise from the policy initiatives assessed and the contextual features of Member States concerned that may produce desirable and/or undesirable effects (Table 3). Part 3 as a whole provides a summary of the main key findings of how the interventions fit with these contextual features through specific mechanisms when enforcing minimum wages and labour legislation.⁷¹ In particular, some patterns

are emphasised here since they are able to best represent the overall approaches of the interventions. Such patterns, nevertheless, are closely interlinked, as emerged during the previous chapters. Furthermore, mechanisms that have worked in reaching positive outcomes depend on each case-specific context and implemented activities.

For a complete presentation of all the set of CMO configurations identified in each case study, see Annex 3.2.

Table 3: Main findings from the realist approach in the 21 case studies through the CMO configuration

Context	Mechanism	Outcome
<ul style="list-style-type: none"> Workers' vulnerability and precariousness in sectors at high risk Complex wage compliance procedures Limited human resources to enforce minimum wage compliance Legal and regulatory frameworks with a holistic approach to compliance Comprehensive legal framework with an extensive scope of subcontracting chain liability Countries' pre-existing culture of partnership 	<ul style="list-style-type: none"> Exchange of information and coordination of different stakeholders Changing employers' behaviour through naming and shaming Changing employers' behaviour through chain liability Changing workers' behaviour through anonymity, friendly approaches and use of native language. 	<ul style="list-style-type: none"> Workers' empowerment and increased knowledge, awareness and trust Increased public attention Lower administrative burden Increased cooperation among relevant stakeholders in compliance

From the analysis of context factors within Member States considered in the case studies, some main features emerge as both hindrance and enabling factors that determine the design of policy interventions aiming for compliance with minimum wages. Naturally, each case study is path-dependent but, in comparative terms, it is possible to identify common contextual factors that emerge as influencing the way in which national authorities act. These external conditions are relevant to the operation of the interventions' mechanisms and influence the scope of policy impacts.

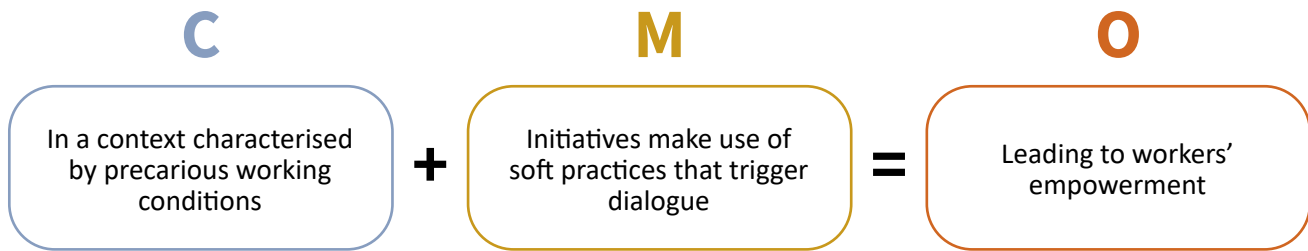
Hindrance factors that characterise the countries' context tend to influence the way in which authorities decide to develop their interventions. In particular, three hindrance context features are identified as potential conditioning factors for policies aiming for compliance: (i) workers' vulnerability and precariousness in sectors at high risk; (ii) complex wage compliance procedures; and (iii) limited human resources to enforce minimum wage compliance. Likewise, enabling contextual factors emerge from the case studies as features potentially already present in the countries' contexts within which policy measures are developed. Three enabling factors that favour

mechanisms in place are identified: (i) legal and regulatory frameworks with a holistic approach to compliance; (ii) a comprehensive legal framework with an extensive scope of subcontracting chain liability; and (iii) countries' pre-existing culture of partnership.

Most of the 21 case studies are set in the context of addressing workers' vulnerable and precarious conditions, but this factor strongly emerges with regard to the five economic sectors to which some of the case studies are related in particular. The construction sector, the meat processing industry, domestic work, platform work and the agricultural sector are among the most at-risk economic sectors in which authorities develop strategies tailored to these specific categories of workers.

When we look at what has worked better for (vulnerable) workers, it can be stressed that most initiatives are embedded in a context characterised by precariousness of workers (C). Working conditions are made precarious by several specific contextual factors such as the absence of workers' representation, fragmented production structures, and the lack of timely and relevant information among both employers and workers. These factors exist to

⁷¹ Annex 3.2 presents in detail all CMO configurations from each of the 21 developed case studies.



varying degrees in each country and each case study, but they all converge in unfavourable working conditions.

Vulnerable workers, overrepresented in social groups such as women, young people and, above all, foreign and posted workers, are the main target group of specific initiatives. In particular, an approach based on practices that favour dialogue and soft practices, changing workers' behaviour through anonymity and friendly language approaches (M), seems to be an important way to indirectly reach positive outcomes in compliance. Vulnerable workers' lack of representation, of knowledge and of trust in institutions makes it challenging for labour authorities to efficiently enforce legislation. The authorities choose, therefore, to proceed with more sensible initiatives aimed at these groups. National authorities and stakeholders involved in the implementation of policies provide several different initiatives that trigger soft practices, such as anonymous platforms, counselling and advisory services, and provision of information through brochures and social media, all of which represent friendly and soft approaches towards workers.

The empowerment of the most vulnerable workers and increased knowledge, awareness and trust (O) are reached, and this in turn is a positive factor, as enforcement of minimum wages also depends on workers' capability to report. Workers' empowerment is seen through higher numbers of complaints, increased knowledge of rights and legislation, higher numbers of regular workers and higher levels of trust. While an approach based on trust and confidence is key to reaching all workers in all sectors, this works particularly well for certain categories of workers overrepresented in highly at-risk economic industries. As mentioned before, foreign workers, posted workers, women and young people make up high proportions of workers in sectors such as construction, domestic work, platform work, agriculture and the meat industry, but also economic activities characterised by high shares of flexible workforce such as temporary agency workers. For these categories, soft initiatives prove to work better.

As seen during the comparative analysis, while the activities and mechanisms mentioned above have as their main target (vulnerable) workers, in the same context characterised by precarious working conditions

and fraudulent practices (C), other types of measures are specifically aimed at reaching employers and companies. From the realist evaluation, it emerges that employers take advantage of precarious working conditions, complex legal frameworks and long complex chains of posting to easily avoid the correct payment of wages and social security contributions, and observance of minimum employment conditions. National authorities confirm that within this framework, among the strategies followed to ultimately reach compliance, policy initiatives that favour a change of behaviour on the part of employers represent a suitable approach.

In particular, two main processes through which authorities change employers' behaviour are naming and shaming, and chain liability (M). Both of them are widely used as pressure mechanisms that lead employers towards compliant behaviour and improving their conduct. This seems to work best for specific sectors and types of companies; large companies that operate in large territorial areas and economic sectors with high numbers of workers fear negative public attention, becoming more attentive to naming and shaming practices and avoiding being liable in non-compliant chains. From the analysis of the case studies, it emerges that rewarding compliant employers is also considered a mechanism of indirect naming and shaming. Naming and shaming through chain responsibility, on the other hand, is triggered in a context in which legal frameworks of chain liability have (already) been adopted. In this sense, the presence of chain liability systems in the country's context emerges as a pre-condition for the successful implementation of specific activities. The implementation of some policies builds on the existence of a legal framework that sets out an extensive scope of chain responsibility in contexts characterised by high levels of subcontracting.

Both naming and shaming and chain liability are effective mechanisms used by national authorities to raise public attention (O). Authorities see this outcome as a potential factor for increasing compliant working conditions, since, as mentioned before, employers avoid being in the spotlight due to non-compliant behaviours. In specific cases, increased attention has ultimately led employers to be willing to resolve cases out of court and to launch negotiations with trade unions.



Another hindrance factor is the limited human resources available for enforcement of legislation (C). This is due to several reasons – limited financial resources, low wages, unqualified personnel, long training procedures for the job – and, inevitably, guides the selection of policy measures when enforcing compliance with minimum wages.

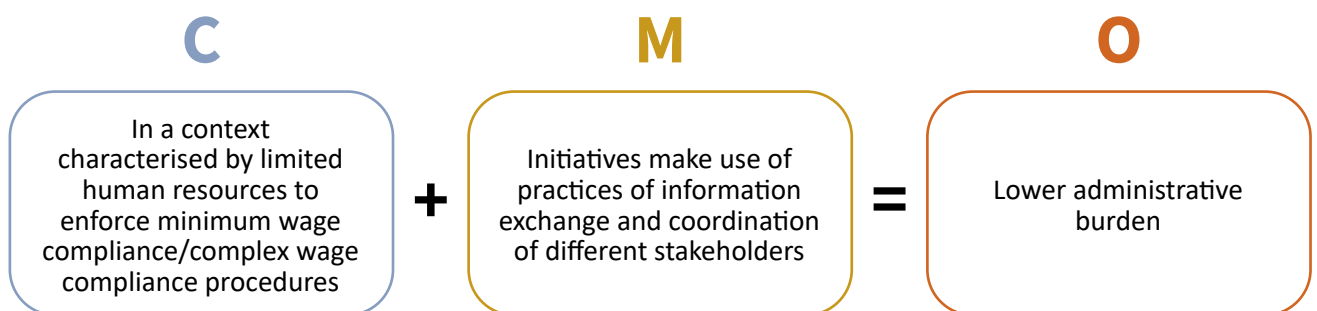
Within this contextual framework, national authorities prioritise reinforced coordination among stakeholders involved in compliance (M), a mechanism that allows savings in both time and human and financial resources. This mechanism is triggered through the use of databases, software, digital devices and online apps that allow authorities to quickly gather and combine data, supporting the labour inspectorates' work on enforcing legislation. Through such tools, an exchange of information and data and regular communication among partners involved take place, allowing relevant authorities to prioritise interventions.

Authorities coordinate with the objective of reducing the administrative burden (O). As seen in Chapter 4, a lower administrative burden ultimately leads authorities to more efficiently identify potential cases of non-compliance, since they are able to prioritise cases, verify information collected with similar partners and obtain a complete picture of the current working conditions by bringing together main stakeholders. Relevant authorities say that employers are also among the main beneficiaries of a lower administrative burden, since in some cases a high level of involuntary non-compliance has been detected on the part of employers, who have difficulties in understanding applicable legislation. This context feature has a strong influence on the level of minimum wage compliance and, consequently, on the way specific

interventions are designed. Within this contextual framework, authorities make use of different strategies (e.g. counselling and advisory initiatives but also digital tools) that aim to simplify administration and reduce the burden on employers. As seen in Chapter 4, this has ultimately led to a voluntary increase in regularising workers on the part of employers, and more efficient and targeted inspections by authorities.

Approaches based on holistic strategies that consider both preventive and deterrent measures seem to best produce effective enforcement (C). In some Member States procedural frameworks are prevalent in which compliance is based on first preventive and then deterrent actions. With this approach, national authorities and stakeholders involved in compliance follow a two-step strategy that starts with taking several preventive measures (generally carried out by social partners) and concludes with a strong deterrent strategy on the part of the labour inspectorate. This contextual feature generally coincides with an already embedded (at least partial) culture of partnership. In countries in which a collaborative culture already exists, authorities see a key role for cooperation and coordination in achieving more effective inspections and targeted approaches.⁷²

Within this framework, the exchange of information and coordination of different stakeholders involved in compliance (M) is highlighted as an effective mechanism to reach positive outcomes. Effective holistic approaches require a good relationship among relevant partners involved in both preventive and deterrence strategies. As in the previously mentioned CMO configuration, this exchange of information takes place through digital tools but also through information exchange, shared fast-track procedures, informal and formal meetings, and



⁷² In some countries there is an embedded culture of partnership that, nevertheless, does not involve all key stakeholders to the same degree (e.g. social partners). This CMO configuration proves to be effective for these cases as well. For instance, in the Dutch WAS and the German Occupational Safety and Health Inspection Act, social partners were not involved in compliance with minimum wages as other relevant stakeholders were. In such cases, mechanisms provided by the measures increase the participation of the social partners and further reinforce the achievement of the outcome.

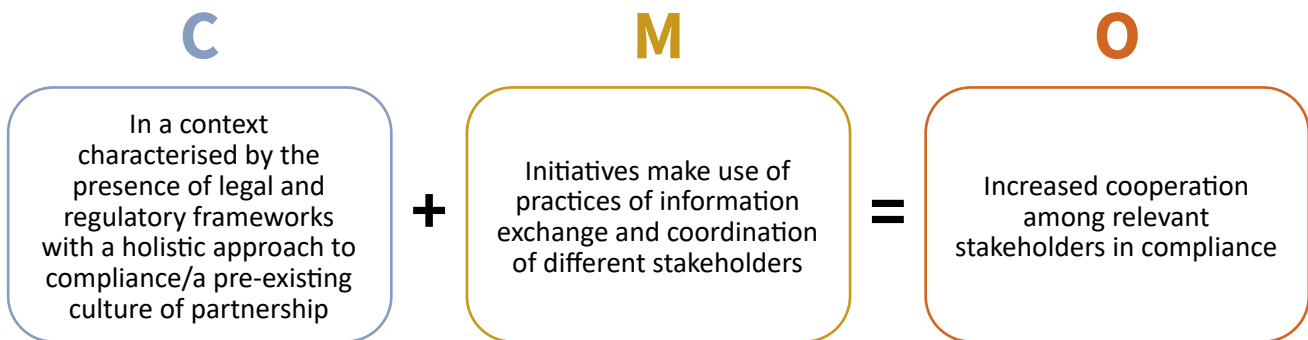
other practices aimed at developing a wide collaboration network. Relevant authorities confirm the success of this approach, since it is based on a system that is approved by all parties involved.

Under such conditions, increased cooperation among relevant stakeholders in compliance (O) is seen as one of the main objectives that ultimately allow authorities to contribute to reaching compliance with minimum wages. An approach integrating different actors and institutions allows them to act more effectively and efficiently.

To sum up, from the comparative analysis of the 21 case studies according to the realist approach, it appears clear

that each country's own strategy in designing policies depends on its contextual features and institutional and cultural values, based on which ad hoc mechanisms prove to work better for specific target groups: employers and different types of workers.

Given this, it is recognised that a holistic approach to compliance plays a major role. Deterrence and preventive measures that aim to support employers, workers and authorities emerge from the case studies as some of the most suitable approaches to effectively reach higher compliance with minimum wages.



Bibliography

- Albertos, M. G. (undated), *Empleo del Hogar: Estrategias para la jubilación y alternativas para su financiación*, Ministerio de Empleo y Seguridad Social, Madrid.
- Albrecht, C., Duran, S., Giesing, Y., Niederhoefer, B., Rude, B. and Steigmeier, J. (2022), *Posted workers from and to Germany*, POSTING.STAT, Leuven, Belgium.
- Almeida, R. and Ronconi, L. (2012), 'The enforcement of labor law in the developing world: Some stylized facts from labor inspections', conference paper, 7th IZA/World Bank Conference: Employment and Development, 4–6 November, New Delhi.
- Ashenfelter, O. and Smith, R. (1979), 'Compliance with the minimum wage law', *Journal of Political Economy*, Vol. 87, No. 2, pp. 333–350.
- Axelrod, R. (1984), *The evolution of cooperation*, Basic Books, New York.
- Ayres, I. and Braithwaite, J. (1992), *Responsive regulation*, Oxford University Press, New York.
- Ban, C., Bohle, D. and Naczyk, M. (2022), 'A perfect storm: COVID-19 and the reorganisation of the German meat industry', *Transfer: European Review of Labour and Research*, Vol. 28, No. 1, pp. 101–118.
- Benassi, C. (2011), *The implementation of minimum wage: Challenges and creative solutions*, ILO Working Paper No. 12, International Labour Office, Geneva.
- Bernhardt, A., Spiller, M. and Theodore, N. (2013), 'Employers gone rogue: Explaining industry variation in violations of workplace laws', *Industrial and Labor Relations Review*, Vol. 66, No. 4, pp. 808–832.
- Bhorat, H., Kanbur, R. and Mayet, N. (2013), 'A note on measuring the depth of minimum wage violation', *Labour*, Vol. 27, No. 2, pp. 192–197.
- Bhorat, H., Kanbur, R. and Stanwix, B. (2015), *Minimum wages in sub-Saharan Africa: A primer*, IZA Discussion Paper No. 9204, Institute of Labour Economics, Bonn.
- Bhorat, H., Kanbur, R. and Stanwix, B. (2019), *Compliance with labor laws in developing countries*, IZA World of Labor, Institute of Labor Economics, Bonn.
- BMAS (Bundesministerium für Arbeit und Soziales) (2020), *Evaluation des Projektes 'Faire Mobilität' Abschlussbericht*.
- Bosch, G. and Hüttenhoff, F. (2022), *Der Bauarbeitsmarkt: Soziologie und Ökonomie einer Branche*, 2nd ed., Campus Verlag, Frankfurt.
- Bosch, G., Weinkopf, C. and Worthmann, G. (2011), *Die Fragilität des Tarifsystems – Einhaltung von Entgeltstandards und Mindestlöhnen am Beispiel des Bauhauptgewerbes*.
- Bosch, G., Hüttenhoff, F. and Weinkopf, C. (2019), *Kontrolle von Mindestlöhnen*, Springer VS, Berlin.
- Bosch, G., Hüttenhoff, F. and Weinkopf, C. (2020), *Corona-Hotspot Fleischindustrie: Das Scheitern der Selbstverpflichtung*, IAQ Report No. 7, DuEPublico, University of Duisburg-Essen, Germany.
- Bossler, M., Jaenichen, U. and Schächtele, S. (2020), 'How effective are enforcement measures for compliance with the minimum wage? Evidence from Germany', *Economic and Industrial Democracy*, Vol. 43, No. 2.
- bpb (2021), *Ein Jahr Arbeitsschutzkontrollgesetz*, web page, accessed 16 August 2023.
- Braithwaite, J. (1985), *To punish or persuade*, SUNY Press, Albany, NY.
- Brandolini, A., Rosolia, A. and Torrini, R. (2011), *The distribution of employees' labour earnings in the European Union: Data, concepts and first results*, ECINEQ Working Paper No. 198, Society for the Study of Economic Inequality.
- Broeck, P. V. (n.d.). *Les services d'inspection sociale et la lutte contre le travail non-déclaré*.
- Bruttel, O. (2019), 'The effects of the new statutory minimum wage in Germany: A first assessment of the evidence', *Journal for Labour Market Research*, Vol. 53, No. 1, pp. 1–13.
- Caliendo, M., Fedorets, A., Preuss, M., Schröder, C. and Wittbrodt, L. (2017), *The short-term distributional effects of the German minimum wage reform*, IZA Discussion Paper No. 11246, Institute of Labour Economics, Bonn.
- CJEU (Court of Justice of the European Union) (2022), 'Judgment of the Court (Third Chamber) of 24 February 2022, Case C-389/20 – CJ v Tesorería General de la Seguridad Social (TGSS), ECLI:EU:C:2022:120', Court Reports – general.
- Clemens, J. and Strain, M. R. (2020), *Understanding 'wage theft': Evasion and avoidance responses to minimum wage increases*, NBER Working Paper No. 26969, National Bureau of Economic Research, Cambridge, MA.
- Danaj, S. and Scoppetta, A. (2022), 'The posting of workers in Austria: Working conditions, rule enforcement, and the fight against social dumping', in Cillo, R. and Perocco, F. (eds.), *Società e trasformazioni sociali*, Vol. 9, Fondazione Università Ca' Foscari, Venice, Italy.
- Deutscher Bundestag (2020), *Entwicklung der Arbeitsbedingungen in der Fleischwirtschaft*, Bundesanzeiger Verlag GmbH, Cologne, Germany.
- DGB (German Trade Union Confederation) (2020), *Fleischindustrie: Ein krankes System*, web page, available at <https://www.dgb.de/themen/++co++fa053272-d1a7-11ea-bd7f-001a4a160123>, accessed 16 August 2023.
- Eerste Kamer der Staten-Generaal (2019), *Evaluatie Wet aanpak schijnconstructies*.
- EFFAT (European Federation of Food, Agriculture and Tourism Trade Unions) (2020), *Hungry for fairness: Raising standards in the meat sector – EFFAT's 10 demands for action at EU level*, Brussels.

- EFFAT (2023), *The reorganisation of the German meat industry since the Labour Protection Control Law*, web page, accessed 16 August 2023.
- ELA (European Labour Authority) (2022), *Labour exploitation in the meat industry revealed in cross-border inspections*, web page, accessed 24 August 2023.
- EMECs (European Market Environment in the Construction Sector) (undated), *The EMECs project*, web page, accessed 25 August 2023.
- Erol, S. and Schulten, T. (2021), *Renewing labour relations in the German meat industry: An end to 'organised irresponsibility'?* Institute of Economic and Social Research, Düsseldorf, Germany.
- Eurofound (2018), *Meat processing workers: Occupational report*, Dublin.
- Eurofound (2019), *Minimum wages in 2019: Annual review*, Publications Office of the European Union, Luxembourg.
- Eurofound (2020), 'Pirate collective agreements', European Industrial Relations Dictionary, Dublin.
- Eurofound (2021), *WP minimum wage developments in the last decade, low-paid employees and minimum wage earners – WPEF21060*.
- European Association of Paritarian Institutions of Social Protection (2021), *Paritarian institutions in Europe: The added-value of the paritarian model of social protection*, Brussels.
- European Commission (2020), *Don't GIG up: Final report*.
- European Parliament (2021), *Migrant seasonal workers in the European agricultural sector*.
- European Platform tackling undeclared work (2020), *Toolkit on competence profiles of labour inspectorates and inspectors in tackling undeclared work*, Publication Office of the European Union, Luxembourg.
- European Platform tackling undeclared work (2021), *Successful cooperation approaches between labour inspectorates and social partners*, workshop paper, Successful Approaches of Cooperation between Labour Inspectorates and Social Partners, 22–23 June.
- Eurostat (undated), *Minimum wage statistics*, web page, accessed 28 July 2023.
- Evolis (2010), *ID cards for construction workers enforce regulatory compliance in Austria*.
- Faire Mobilität (2022), *Faire Mobilität Beratungsaufkommen: Kennzahlen aus der Beratungsarbeit 2022* [PDF], available at <https://www.faire-mobilitaet.de/ueber-uns/++co++cfe53040-35a2-11ec-a1f7-001a4a160123>, accessed 24 August 2023.
- Fechner, H. (2020), 'Posting of workers before German courts', in Rasnača, Z. and Bernaciak, M. (eds.), *Posting of workers before national courts*, European Trade Union Institute, Brussels.
- Federal Labour Court (2012), 'Judgment of 16 May 2012, Case 10 AZR 190/11 – Bürgenhaftung – Bauträger' (in English Guarantor Liability – Property Developer), available at <https://www.bag-urteil.com/16-05-2012-10-azr-190-11/>, accessed 24 August 2023.
- Fedorets, A., Grabka, M. M. and Schröder, C. (2019), *Mindestlohn: Nach wie vor erhalten ihn viele anspruchsberechtigte Beschäftigte nicht*, DIW Weekly Report 28/2019, Deutsches Institut für Wirtschaftsforschung, Berlin.
- Fletcher, A., Jamal, F., Moore, G., Evans, R. E., Murphy, S. and Bonell, C. (2016), 'Realist complex intervention science: Applying realist principles across all phases of the Medical Research Council framework for developing and evaluating complex interventions', *Evaluation*, Vol. 22, No. 3, pp. 286–303.
- Garnero, A. (2018), 'The dog that barks doesn't bite: Coverage and compliance of sectoral minimum wages in Italy', *IZA Journal of Labor Policy*, Vol. 7, No. 1, pp. 1–24.
- Garnero, A. and Lucifora, C. (2022), 'Turning a 'blind eye'? Compliance with minimum wage standards and employment', *Economica*, Vol. 89, No. 356, pp. 884–907.
- Garnero, A., Kampelmann, S. and Rycx, F. (2015), 'Sharp teeth or empty mouths? European institutional diversity and the sector-level minimum wage bite', *British Journal of Industrial Relations*, Vol. 53, No. 4, pp. 760–788.
- Garnero, A., Rycx, F. and Terraz, I. (2020), 'Productivity and wage effects of firm-level collective agreements: Evidence from Belgian linked panel data', *British Journal of Industrial Relations*, Vol. 58, No. 4, pp. 936–972.
- Gilmore, B., McAuliffe, E., Power, J. and Vallières, F. (2019), 'Data analysis and synthesis within a realist evaluation: Toward more transparent methodological approaches', *International Journal of Qualitative Methods*, Vol. 18.
- González Aparicio, S. (2019), *EL trabajo doméstico en España: Radiografía de los problemas sociales, económicos y laborales que se esconden detrás del sector hogares*, Universidad Pontificia Comillas, Madrid.
- Goraus-Tańska, K. and Lewandowski, P. (2019), 'Minimum wage violation in central and eastern Europe', *International Labour Review*, Vol. 158, No. 2, pp. 297–336.
- Green, A. (2017), *Hours off the clock*, Center for Economic Studies, US Census Bureau, Suitland, MD.
- Green, F. (2006), *Demanding work: The paradox of job quality in the affluent economy*, Princeton University Press, Princeton, NJ.
- Green, F. and McIntosh, S. (2001), 'The intensification of work in Europe', *Labor Economics*, Vol. 8, No. 2, pp. 291–308.
- Haidinger, B. (2018a), *Enhancing economic democracy for posted workers: The case of Austria*, Solidar, Brussels.
- Haidinger, B. (2018b), *Transnational monitoring and enforcement of posted work: The case of Austria*, Solidar, Brussels.
- Haidinger, B. and Papouschek, U. (2021), *SPLIN Austrian report – Construction sector*.
- handwerk.com (2019), 'Finanzkontrolle Schwarzarbeit bekommt mehr Befugnisse', 4 July.

- Hartlapp, M. (2007), 'On enforcement, management and persuasion: Different logics of implementation policy in the EU and the ILO', *Journal of Common Market Studies*, Vol. 45, No. 3, pp. 653–674.
- Heinen, A. (2017), *Liability in subcontracting chains: National rules and the need for a European framework*.
- ILO (International Labour Organization) (2006), 'Strategies and practices for labour inspections', GB.297/ESP/3, 297th session, November 2006, Geneva, p. 4.
- ILO (2009), *Agriculture: a hazardous work*, web page, accessed 3 November 2023.
- ILO (2014), 'Minimum wage systems', conference paper, International Labour Conference, 103rd session, Geneva, Report 103/III/1B.
- ILO (2016), *Minimum wage policy guide*, Geneva.
- ILO (2021), *Global wage report 2020–21: Wages and minimum wages in the time of COVID-19*, Geneva.
- ILO (2022), *Guidelines on general principles of labour inspection*, Geneva.
- ILO (undated), *What is a minimum wage: 1.1 Definition and purpose*, web page, accessed 6 October 2023.
- Ilsøe, A. (2017), 'The digitalisation of service work – social partner responses in Denmark, Sweden and Germany', *Transfer: European Review of Labour and Research*, Vol. 23, No. 3, pp. 333–348.
- Ilsøe, A. and Larsen, T. P. (2020), 'Digital platforms at work: Champagne or cocktail of risks?' in Strømme-Bakhtiar, A. and Vinogradov, E. (eds.), *The impact of the sharing economy on business and society*, 1st ed., Routledge, London.
- Jagosh, J., Pluye, P., Macaulay, A. C., Salsberg, J., Henderson, J., Sirett, E. et al (2011), 'Assessing the outcomes of participatory research: Protocol for identifying, selecting, appraising and synthesizing the literature for realist review', *Implementation Science*, Vol. 20, No. 6, Article 24.
- Ji, M. and Weil, D. (2015), 'The impact of franchising on labor standards compliance', *Industrial and Labor Relations Review*, Vol. 68, No. 5, pp. 977–1006.
- Kahlert, R. and Danaj, S. (2021), *Bridging the gap between legislation and practice in the posting of workers: Austria country report*, European Centre for Social Welfare Policy and Research, Vienna.
- Kampelmann, S., Garnerio, A. and Rycx, F. (2013), *Minimum wages in Europe: Does the diversity of systems lead to a diversity of outcomes?* European Trade Union Institute Report 128, European Trade Union Institute, Brussels.
- Kanbur, R., Ronconi, L. and Wedenoja, L. (2013), 'Labour law violations in Chile', *International Labour Review*, Vol. 152, No. 3, pp. 431–444.
- Lucifora, C. and Vigani, D. (2021), 'Losing control? Unions' representativeness, pirate collective agreements and wages', *Industrial Relations*, Vol. 60, No. 2, pp. 188–218.
- MAGS (Ministerium für Arbeit, Gesundheit und Soziales des Landes Nordrhein-Westfalen) (2019), *Faire Arbeit in der Fleischindustrie*, Düsseldorf, Germany.
- Mansoor, K. and O'Neill, D. (2020), *Minimum wage compliance and household welfare: An analysis of over 1500 minimum wages*, IZA Discussion Paper No. 13298, Institute of Labour Economics, Bonn.
- McGuinness, S., Redmond, P. and Delaney, J. (2020), *Minimum wage non-compliance: Evidence from Ireland*, IZA Discussion Paper No. 12884, Institute of Labour Economics, Bonn.
- Milkman, R., González, A. L. and Ikeler, P. (2012), 'Wage and hour violations in urban labour markets: A comparison of Los Angeles, New York and Chicago', *Industrial Relations Journal*, Vol. 43, No. 5, pp. 378–398.
- Mindestlohn Kommission (2022), 'The minimum wage in Germany', workshop presentation, International Workshop of the German Minimum Wage Commission, 7 October, Berlin.
- Nederlandse Arbeidsinspectie (undated), *Werkwijze organisatie*, web page, accessed 28 July 2023.
- OECD (Organisation for Economic Co-operation and Development) (2021), 'Working time and its regulation in OECD countries: How much do we work and how?' in *OECD employment outlook 2021: Navigating the COVID-19 crisis and recovery*, OECD Publishing, Paris.
- Olson, M. (1965), *The logic of collective action: Public goods and the theory of groups*, Harvard University Press, Cambridge, MA.
- Ostrom, E. (1990), *Governing the commons: The evolution of institutions for collective action*, Cambridge University Press, Cambridge, UK.
- Paternoster, R. and Sampson, S. (1996), 'Sanction threats and appeals to morality: Testing a rational choice model of corporate crime', *Law & Society Review*, Vol. 30, No. 3, pp. 549–584.
- Pawson, R. (2006), *Evidence-based policy: A realist perspective*, Sage, London.
- Pawson, R. and Tilley, N. (1997), *Realistic evaluation*, Sage, London.
- Ram, M., Edwards, P. and Meardi, G. (2017), 'Non-compliance and the national living wage: Case study evidence from ethnic minority and migrant-owned businesses', workshop paper, Low Pay Commission Research Workshop, April.
- Rani, U., Belser, P., Oelz, M. and Ranjbar, S. (2013), 'Minimum wage coverage and compliance in developing countries', *International Labour Review*, Vol. 152, Nos. 3–4, pp. 381–410.
- Riesenfelder, A., Schelepa, S. and Wetzell, P. (2012), *Monitoring der Arbeitsmarktöffnung – Auswirkungen auf Beschäftigungsformen und auf Lohndumping*, ÖGB-Verl, Vienna.
- Ritchie, F., Veliziotis, M., Drew, H. and Whittard, D. (2017), 'Measuring compliance with minimum wages', *Journal of*

Economic and Social Measurement, Vol. 42, Nos. 3–4, pp. 249–270.

Ronconi, L. (2010), ‘Enforcement and compliance with labor regulations’, *Industrial and Labor Relations Review*, Vol. 64, No. 4, pp. 719–736.

Salter, K. L. and Kothari, A. (2014), ‘Using realist evaluation to open the black box of knowledge translation: A state-of-the-art review’, *Implementation Science*, Vol. 9, Article 115.

Santos, A. J. R., Santos, S. P., Amado, C. A. F., Rebelo, E. L. and Mendes, J. C. (2020), ‘Labor inspectorates’ efficiency and effectiveness assessment as a learning path to improve work-related accident prevention’, *Annals of Operations Research*, Vol. 288, No. 2, pp. 609–651.

Schulten, T. and Schulze-Buschhoff, K. (2015), *Sector-level strategies against precarious employment in Germany: Evidence from construction, commercial cleaning, hospitals and temporary agency work*, WSI Working Paper No. 197, Institute of Economic and Social Research, Düsseldorf, Germany.

SEO Economisch Onderzoek (2019), *Effecten openbaarmaking inspectiegegevens Inspectie SZW*, Amsterdam.

SOKA-BAU (2021). *SOKA-BAU: Informationen 2021*, Urlaubs- und Lohnausgleichskasse der Bauwirtschaft Zusatzversorgungskasse des Baugewerbes AG, Wiesbaden.

Svenska Byggnadsarbetareförbundet (2021), *Verksamhetsberättelse, hållbarhetsredovisning och årsredovisning 2021*, Stockholm.

Tallberg, J. (2002), ‘Paths to compliance: Enforcement, management, and the European Union’, *International Organization*, Vol. 56, No. 3, pp. 609–643.

Tweede Kamer der Staten-Generaal (2016), *Eerste monitor Wet aanpak schijnconstructies*, web page, accessed 16 August 2023.

Vejdirektoratet (2021), *Statsvejnettet 2021: Oversigt over tilstand og udvikling – Rapport 610*.

Velázquez, M. (2018), ‘Setting the scene III: Labour inspectorates in the European Union’, presentation, Working Group on Cross-border Enforcement, EU–Georgia Dialogue, September.

Walters D. (2016), *Labour inspections and health and safety in the EU*, Special Report 3/34.

Weil D. (2010), *Improving workplace conditions through strategic enforcement*, Boston University School of Management Research Paper No. 2010/20.

Westhorp, G. (2014), *Realistic impact evaluation: An introduction*, Methods Lab, Overseas Development Institute, London.

Williams, C. C. (2019), ‘Tackling undeclared work in the European Union: An evaluation of government policy approaches’, *UTMS Journal of Economics*, Vol. 10, No. 2, pp. 135–147.

Wispelaere, F. D., Albrecht, C., Giesing, Y., Rude, B., Danaj, S., Geyer, L. et al (2022), *Posted workers within the EU – More flexibility for the labor market or a risk factor for social dumping?*

WRC (Workplace Relations Commission) (undated-a), *Sectoral employment orders*, web page, accessed 28 July 2023.

WRC (undated-b), *Employment regulation orders*, web page, accessed 28 July 2023.

WSI (2021), ‘Mindestlohtarifvertrag in der Fleischwirtschaft’, blog post, 14 June.

Ye, L., Gindling, T. and Li, S. (2015), ‘Compliance with legal minimum wages and overtime pay regulations in China’, *IZA Journal of Labor & Development*, Vol. 4, No. 1, pp. 1–35.

Annexes

The annexes to this report are available separately as working papers, which are available on the publication web page on the 'Eurofound papers' tab. The headings below link to the corresponding working paper.

Annex to Part 1

Annex 1: Methodological discussion paper – Approaches to estimating the magnitude of compliance with minimum wages

Annexes to Part 2

Annex 2.1: Additional tables

Annex 2.2: Questionnaire and guidelines

Annex 2.3: Good practices indicated in the Network of Eurofound Correspondents reports: Comparative table and fiches

Annex 2.4: Country fiches

Annex 2.5: List of contributors from the Network of the Eurofound Correspondents

Annex 2.6: List of nominated* experts for Module 1

Annexes to Part 3

Annex 3.1: Case study methodology

Annex 3.2: CMO configuration resulting from the realist evaluation of the case studies

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In the EU, non-compliance with statutory or negotiated minimum wages averages 6.93% or 1.3%, depending on the statistics used. The lowest national estimate is 0.01% in Belgium and the highest is 11.59% in Hungary. It mostly affects young workers, those on fixed-term or part-time contracts and those working for small companies. It is more common in services than in manufacturing, and is characterised by shorter working time. Member States monitor, enforce and promote compliance in similar ways, although with some differences.

This report identifies hindering and enabling factors. Some countries focus on specific economic sectors, such as construction, domestic work, platform work, agriculture and meat processing. National authorities often enforce minimum wages indirectly by helping employers comply, raising workers' awareness, and helping stakeholders increase cooperation and develop faster procedures. Combining these soft initiatives with tougher measures increases the effectiveness of inspectorates' actions in enforcing compliance with minimum wages.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency established in 1975. Its role is to provide knowledge in the area of social, employment and work-related policies according to Regulation (EU) 2019/127.