

Working conditions

The rise in telework: Impact on working conditions and regulations



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Contents

	Executive summary	1
	Introduction	3
	Background	3
	Methodology	3
	Defining and conceptualising telework	4
1.	Prevalence of telework in the EU	7
	Working from home: Comparing the numbers teleworking before and during COVID-19	7
	Teleworkability: What occupations can be carried out remotely?	16
	Teleworkability: Exploring wages and employment outcomes	20
2.	Impact of teleworking on working conditions	23
	Organising working time, connecting and disconnecting during the pandemic	23
	Monitoring telework during the pandemic	30
	Hybrid work: productivity, work relationships and preferences	31
	Potential of telework to improve work–life balance: Lessons from COVID-19	35
	Health and well-being while teleworking	40
3.	Telework regulation in the EU	45
	Regulatory frameworks in the EU	45
	Changes in telework regulation during the pandemic	47
	Overview of telework regulations in EU Member States	52
4.	Conclusions	59
	Telework has changed the world of work	59
	COVID-19 expanded the potential of telework	59
	Working conditions in the world of telework	61
	Uneven impact of changes in telework regulations	63
	Likely future trends for telework	65
	References	67
	Annexes	73
	Annex 1: Determinants of teleworking in the EU: Logit estimates	73
	Annex 2: Mapping the content of key legislative provisions	75
	Annex 3: Mapping key provisions in national-level collective agreements	77
	Annex 4: Network of Eurofound Correspondents	78

Executive summary

Introduction

Even after the end of COVID-19 restrictions across EU Member States, many workers continue to telework in some form. Employers and employees have adapted to telework arrangements, which is mainly due to the reduction of cultural, technological and social barriers. Telework is now well established and affects overall work organisation and working conditions, as well as employees' work-life balance and well-being. New regulations on telework across EU Member States, together with agreements between workers and employers as well as company level practices, are shaping the future of remote working.

This report explores recent trends in the prevalence of telework, the working conditions of employees who were teleworking during the pandemic and telework regulations in the EU. It also identifies challenges and opportunities for the future.

The report is mainly based on contributions from the Network of Eurofound Correspondents, and analyses of the EU Labour Force Survey 2020 and the European Working Conditions Telephone Survey (EWCTS) 2021. These are complemented by literature reviews and findings from Eurofound's *Living, working and COVID-19* e-survey.

Policy context

The implementation of the 2002 EU social partners' Framework Agreement on Telework resulted in national-level regulation in all EU Member States except Ireland and Cyprus. However, the escalation of telework during the pandemic led some countries to adopt new telework regulations and kickstarted debates on how to best to deal with both the challenges and opportunities of telework.

At EU level, the European Parliament approved a resolution on the right to disconnect on 21 January 2021; the Council of the European Union published conclusions on telework on 3 June 2021 inviting the social partners, while fully respecting their role and autonomy, to continue to engage in social dialogue, at all levels, on the future of work, and on digitalisation and telework in particular. In parallel to these initiatives, discussions were held by the EU social partners that resulted in a decision to start negotiations to review and update the 2002 Framework Agreement on Telework with a view to it being adopted as a legally binding agreement in the form of an EU directive.

Key findings

- The pandemic and the increase in telework have resulted in altering working conditions and practices, leading to the introduction or revision of telework regulations and practices. Technological developments, a net increase in teleworkable jobs and employees' and employers' preferences make it likely that the prevalence of telework, despite a stabilisation at the beginning of 2022, will further increase in the long term.
- The pandemic unveiled the enormous potential of telework. During this time, there was an upsurge in telework, incorporating groups of workers who previously had scarcely carried out this form of work. As a result, telework became very widespread in some countries, for example in Ireland. However, overall, the categories of employees with the highest share of teleworking remain the same and include highly skilled workers, slightly more women than men, workers from mainly urban areas and those who work in the service sectors.
- The working conditions of teleworking employees have only partially changed. It has been shown that telework can increase pressure on workers to be 'permanently' available or to work during their free time. Some teleworkers have experienced isolation and work-life balance conflicts linked to the blurring of boundaries between work and private life. However, overall, telework improves work-life balance as it can help workers to juggle childcare, significantly reduce commuting time and result in an increase in work autonomy and better use of working time.
- Telework prevalence is not necessarily influenced by gender. However, there are gender differences in terms of work-life balance. Women generally found it more difficult than men to balance telework with their private life during the pandemic because, as a result of pre-existing inequalities and gender roles, they were more likely to bear the brunt of additional unpaid work (caring, housework and home-schooling).

- Employees, and to some extent employers, prefer the hybrid model of telework (partial telework or part-time telework). It has been proven that hybrid work saves on commuting time, improves work-life balance, reduces feelings of isolation, and ensures more efficient time management. However, there are some drawbacks: teleworking employees reported working during their free time in an ‘always on’ work culture, which can impact on their health and well-being, including in relation to preventing stress, anxiety and burnout. In addition, some managers have reported difficulties in communicating with employees, carrying out management tasks and supporting their employees.
- Occasional telework, which refers to working from home ‘rarely’ or ‘sometimes’, was reported less frequently from employees than regular telework (full-time and hybrid telework). However, occasional telework can also enhance working conditions and is attractive to both employees and employers.
- Just under half of EU Member States made regulatory changes related to telework during the pandemic; some of these changes affect all aspects of telework while others are more narrowly focused. Company-level agreements and policies are more common in countries where social dialogue plays an important role, such as France. In countries with weak social dialogue, such as Bulgaria, company-level agreements are extremely rare or non-existent.
- Despite some general patterns, differences between countries exist in all areas studied in the report: prevalence of teleworking, working conditions and telework regulations. It is expected that these differences will prevail in the future.
- In order to protect workers, while also ensuring that telework is beneficial for companies, future EU legislation should facilitate the development of appropriate telework regulations at national level, while acknowledging existing country differences in relation to the prevalence of telework, the impact on working conditions, industrial relation systems and broader work cultures.
- Given its potential for improving work–life balance, telework can be used as a tool to increase the participation of women in the workforce. At the same time, policymakers need to address the social, economic and cultural inequalities that result in women benefiting less from telework than men.
- Most new regulations on telework include ‘full-time telework’ and ‘partial telework’ (including hybrid work) when addressing the challenges that arise from this new working arrangement. However, occasional telework can also improve gender equality, work–life balance and well-being, and it can encourage the participation of employees of working age who are at risk of leaving the labour market.
- Efforts to promote telework should also seek to address potential problematic areas, such as working during free time and permanent connectivity, while ensuring that all teleworking employees have the right equipment and that their well being is protected, notably in relation to psychosocial risks. Appropriate organisation and management of telework is necessary to avoid such risks.
- The expansion of telework may lead to further inequalities in the European workforce. Already, for various reasons, only some workers have access to telework. From a structural perspective, workers with teleworkable jobs are more likely to have ‘good jobs’, that is jobs that are well paid and have higher job security. From a micro perspective, this will create greater differences in work–life balance and quality of work. Therefore, policymakers should ensure a level playing field between teleworking employees and employees who are unable to telework.

Policy pointers

- Telework is a key component of the world of work in the 21st century. While taking into account national practices and respecting the role and autonomy of social partners, regulatory frameworks in EU Member States should be adapted to ensure they address the outstanding issues that this new way of working brings, including in relation to the right to request telework, right to disconnect, geographical location of teleworking, teleworking costs coverage and psychosocial risks.

Introduction

Background

Prior to the pandemic, two significant changes were taking place in the European economy. First, a growing number of jobs, enabled by internet connectivity and ICT, could be worked from anywhere and at any time. Second, the share of women in the workforce was continuing to grow, leading to a greater number of dual-earner households. The changing profile of European workers, including the ongoing ageing of the EU workforce, and the way they engaged in work led to growing demands for flexibility in terms of working hours and place of work. As a result, telework was slowly becoming more widespread.

Following the outbreak of COVID-19 in March 2020, telework, which was still relatively uncommon, suddenly became widespread. Due to public health measures, including social distancing and lockdown measures, imposed by governments to stem the spread of the virus, and the subsequent closure of many workplaces, the number of employees teleworking doubled over 2020 and 2021. The widespread shift to telework modified the working conditions of many employees, both because of the specific conditions of telework and also due to the specific context of the pandemic itself.

This report outlines the changes that have occurred in the world of work during the pandemic due to the increase in telework. It includes the evolution of telework, the profiles of the workers and sectors involved, the working conditions experienced by those teleworking and the regulatory changes that have taken place. The focus is on employees because they constitute most 'new' teleworkers, are subject to labour regulations and generally rely on their employer's approval to work from home.

The report is structured as follows. Chapter 1 analyses the evolution and prevalence of telework, and then provides an update on the teleworkability of various occupations in the EU. It provides insights into wage and employment inequalities related to telework. Chapter 2 identifies the working conditions of teleworkers during the pandemic and details which aspects of these working conditions are inherent to telework or which were a result of the working situation during the pandemic. Chapter 3 focuses on telework regulations in the EU Member States, highlighting the main changes occurring during the pandemic. Finally, conclusions and future challenges are presented.

Methodology

This report presents Eurofound's consolidated research on telework during the COVID-19 pandemic in 2020 and 2021. It includes analyses from the report *Working anytime, anywhere: The effects on the world of work*, which explored telework and ICT-based mobile work (TICTM), based on information gathered from 10 Member States: Belgium, Finland, France, Germany, Hungary, Italy, the Netherlands, Spain, Sweden and the United Kingdom (Eurofound and ILO, 2017). This information was supplemented by an analysis of the European Working Conditions Survey 2015 (EWCS 2015). In addition, reference is made to the report *Telework and ICT-based mobile work: Flexible working in the digital age*, which includes an additional literature review and further analyses of the EWCS 2015 data, in-depth case studies on TICTM arrangements and national frameworks (Eurofound, 2020a). From a regulatory perspective, national contributions from all the EU Member States regarding flexible working using ICT and work-life balance were used to map regulations, with a specific focus on the role of telework in improving work-life balance (Eurofound, 2020b).

The EU Labour Force Survey 2020 (EU-LFS 2020) was used to study the evolution of telework (both occasional and usual telework) and to identify changes in its prevalence for different groups of workers. The same source of information was used to identify 'teleworkable' jobs and to explore inequalities driven by the expansion of telework.

National contributions from the Network of Eurofound Correspondents from the 27 EU Member States were compared to identify the working conditions of teleworking employees during the pandemic at national level. This research is complemented by a descriptive and multivariate analysis of the European Working Conditions Telephone Survey 2021 (EWCTS 2021) to identify teleworking conditions at EU level. The EWCTS 2021 covers a representative sample of 71,758 employees and self-employed people in 36 European countries. The survey questionnaire covers a wide range of topics: worker characteristics (including household situation), job design, employment conditions, working time, exposure to physical risks, work organisation, skills use and autonomy, work-life balance, worker participation and representation, the social environment at work and health and well-being. In addition, Eurofound's *Living, working and COVID-19* e-survey addresses some issues related to working conditions and telework conditions. Where relevant, specific findings from this survey are included to complement the other sources of information.

In the final chapter of this report, contributions from the Network of Eurofound Correspondents are used to map and identify regulatory changes related to telework in EU Member States.

Finally, literature reviews were carried out regarding the prevalence of telework, the working conditions of teleworking employees and the regulatory framework of teleworking in the EU.

Note on gender/sex in the report: In the analysis of the **EWCTS 2021** data, respondents are categorised according to gender on the basis of the following question: 'Would you describe yourself as ... a man; a woman; or would you describe yourself in another way?'. The number of respondents who described themselves 'in another way' was not sufficient to allow for separate analysis. For the analysis of the **Labour Force Survey 2021**, the variable used in the microdata has been labelled as 'sex'. The terms 'male' and 'female' are used adjectivally to describe characteristics and experiences relating to men and women, respectively.

Defining and conceptualising telework

Literature uses different concepts to reflect the impact of new ICT, including the possibility to increase flexibility as regards working time and place. Nowadays, 'telework' is the most prevalent term used in empirical research in Europe, in European regulation and in national legislation to refer to work arrangements outside employer's premises enabled by ICT. Nevertheless, the term 'telework' can refer to a number of different concepts and varieties of working arrangements that partly overlap. For a comprehensive review of terms used since the invention of telework, see the Eurofound report *Telework in the EU: Regulatory frameworks and recent updates* (Eurofound, 2022a).

Often the various terms do not really refer to different types of remote working; instead, they simply emphasise specific aspects of telework arrangements. An example is the term 'hybrid work', which is used to refer to partial telework or part-time telework (terms that were used before the pandemic).

It is important to provide a definition of telework for this report. In previous Eurofound research, telework was often considered as a work arrangement where work was performed outside the default place of work by

means of ICT with different frequencies. Acknowledging that for most employees the default place of work is their employer's premises, and that during the pandemic remote work was mainly carried out from home, the definition has been modified. This modification also takes into account the fact that telework arrangements vary according to the frequency with which an employee works either from home, the office or other places. Therefore, for this report, telework is considered as a work arrangement in which work is carried out totally or partially from home with the support of ICT and partially or never from the employer's premises. This arrangement can include other places of work, such as cafes, means of transport and remote work hubs, but the conditions of the definition must be in place for an arrangement to be considered as telework. In simpler words, telework is considered as working from home with the support of ICT.

To understand the concept of telework, it is also important to refer to the statistical sources used to research telework. Before the pandemic, Eurofound used the term 'TICTM' (Telework and ICT-based mobile work) to refer to any work arrangement carried out totally or partially outside of the employer's premises, distinguishing between 'regular home-based telework', 'occasional TICTM' and 'ICT-based mobile work' (Eurofound and ILO, 2017). These concepts were used in the EWCS 2015. For this report, the main statistical sources used are the EU-LFS 2020 and the EWCTS 2021.

The EU-LFS 2020 includes two categories related to telework. One is 'occasionally working from home' and the other is 'usually working from home'. In Chapter 1, the EU-LFS 2020 is used to study telework prevalence as it is the most reliable source because of the large number of cases in national samples and therefore at EU level.

In Chapter 2, the EWCTS 2021 is used to analyse the working conditions of employees teleworking. In the questionnaire of this survey, respondents were asked to give their place of work in the 12 months preceding the survey and to describe how often they worked there, choosing from the options 'never', 'rarely', 'sometimes', 'often' and 'always'. The telework variable based on the EWCTS 2021 was based on three variables:

- ICT should be used either 'always' or 'often'
- employees' job must be teleworkable¹
- employees should have been working from home either 'rarely', 'sometimes', 'often' or 'always'

1 See Chapter 1 for a definition of a teleworkable job.

2 Regular partial telework includes hybrid work, which entails working from home often, and at least sometimes from the office. It constitutes the biggest share of employees (3 out of 4) in regular or partial telework. The rest of the group includes workers who often work from home and from locations other than the employer's premises. Due to the popularisation of the term 'hybrid work', this term will be used in the report.

Table 1: Frequency working with ICT from home and statistical sources

Frequency of teleworking	EU-LFS 2020	EWCTS 2021	EWCS 2015 (Eurofound and ILO, 2017)
Working from home full-time	Usually work from home More than half of days	Full-time telework Always work from home	Regular home-based telework
High-frequency working from home	Usually work from home More than half of days	Partial telework (including hybrid work) Often work from home	Regular home-based telework
Occasionally working from home	Occasionally work from home Sometimes Less than half of days	Occasional telework (Sometimes or rarely work from home)*	Occasional TICTM

Note: *When analysing specific working conditions, the categories ‘sometimes’ and ‘rarely’ can be separated. For example, this can happen when analysing some work–life balance-related variables where the behaviour of these categories is different.

Source: Authors’ elaboration, based on the EWCS 2015, EWCTS 2021, and EU-LFS 2020 and 2021

The total cases identified according to these criteria, limited to employees in EU Member States, is 31,875. Respondents were classified as follows.

- **Full-time telework:** Employees ‘always’ working from home.
- **Partial telework:** Employees ‘often’ working from home, which includes hybrid work.²
- **Occasional telework:** Employees ‘rarely’ or ‘sometimes’ work from home.
- **Respondents working only from the employer’s premises:** This group of employees was differentiated into two groups – those with a teleworkable job, labelled ‘employer’s premises (some degree of teleworkability)’ and those without a teleworkable job, labelled ‘employer’s premises (non-teleworkable job)’.

Table 1 provides the terms used based on the research using the EWCTS 2021 and the EU-LFS 2020 and the Eurofound/International Labour Office research based on the EWCS 2015. The equivalences presented should be understood as proxies and not as identical categories. The reason is that methodologies and categories are not the same in the three surveys. For example, the questionnaire of the EWCTS is not comparable to the EWCS 2015 because the categories related to frequency and place of work are different. Therefore, comparisons of findings from these sources of information must be made with caution. Finally, as ICT-based mobile work is not the focus of this report, the term is not included under the heading EWCS 2015 (Eurofound and ILO, 2017).

1 Prevalence of telework in the EU

This chapter provides an overview of the changes in the prevalence of telework during the pandemic. It explores the quantitative future of telework based on an analysis of which jobs can potentially be carried out from home with the support of ICT.

Following the outbreak of COVID-19, remote working became the customary mode of working for many employees due to workplace closures. Several 'live' surveys have tried to estimate the extent of working from home immediately after the enforcement of lockdowns. According to Eurofound's *Living, working and COVID-19 e-survey*, in April 2020 around 39% of employees in EU Member States were working from home, increasing to 48% in July 2020. Similarly, a cross-national, real-time survey carried out in China, Japan, South Korea, the United States and the United Kingdom found that nearly 4 in 10 employees started to telework when the pandemic started (Belot et al, 2020). Official data based on representative survey samples – for example the EU-LFS 2020 – arrived later and tended to show that the shares of workers working from home in 2020 were lower than suggested by the various live surveys cited above, although still markedly higher than before the COVID-19 pandemic. Those differences are related to the fact that data from the EU-LFS 2020 considered annual averages while the other estimates showed figures of specific moments in time and were implemented online.

In this chapter, the extent of teleworking before and during the COVID-19 pandemic is quantified based on the best available EU-wide comparable data from the EU-LFS 2020. Although longer-term trends are covered, the comparison relates primarily to 2019, immediately before the COVID-19 outbreak, and 2020 to 2021, the first two years of the pandemic. The former serves as a baseline for assessing the extent to which the pandemic has boosted the prevalence of working from home, identifying the groups of workers that were most affected.

The chapter focuses on dependent employees. While the prevalence of teleworking has traditionally been higher among the self-employed, who are freer to choose where they work, dependent employees have experienced the largest increase in teleworking as a result of the COVID-19 outbreak (Sostero et al, 2020).

The chapter is structured as follows. In the first section, descriptive data on the prevalence of teleworking before and during the COVID-19 outbreak from the EU-LFS 2020 are presented. Multivariate logit models are used to analyse the extent to which the findings identified in the descriptive analysis hold true in a multivariate framework, that is, when controlling for work-related and personal characteristics (Annex 1).

In the second section, indications are given on the potential for the rise in teleworking based on an occupational classification of teleworkability published soon after the onset of the pandemic in June 2020 by Eurofound and European Commission Joint Research Centre researchers (Sostero et al, 2020). This analysis ranks occupations by feasibility of teleworking based on task content, and suggests which occupations are more likely to make use of potential opportunities for remote working.

The third section extends the analysis of teleworkability to show how remote working could open up new dimensions of workplace inequality. Jobs that are teleworkable tend to be 'good jobs', that is jobs that are well paid, require higher qualifications and offer high levels of work autonomy.

Working from home: Comparing the numbers teleworking before and during COVID-19

In this section, the prevalence of working from home during the COVID-19 pandemic in the EU Member States is presented. Annual data from the EU-LFS 2020 and 2021³ have been used and comparisons with the pre-pandemic situation are also presented.⁴

Overview from 2008 to 2021: Prevalence of telework by gender and age

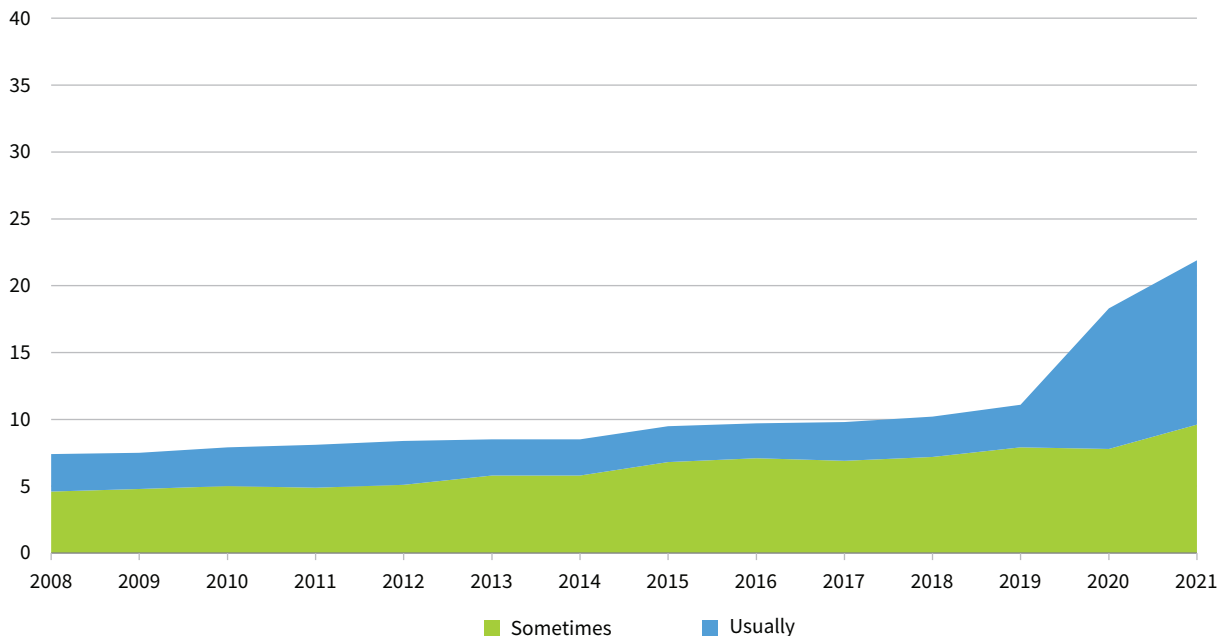
Before focusing on the evidence from during the pandemic, an overview is provided of the evolution of telework among employees from 2008 to 2021. In 2008, less than 8% of employees were working from home 'sometimes' or 'usually'.⁵ This share gradually increased over the years, reaching 11% in 2019, just before the crisis. Following the start of the pandemic, the

3 EU-LFS microdata 2020 were used for most of the analysis in this section, but some aggregates may have been updated (Figures 1–9 and 15) with EU-LFS 2021 data published on the Eurostat website as the text was being finalised (May 2022).

4 The specific question asked in the EU-LFS, on which this analysis relies, relates to 'working from home', which in this report is equivalent to telework.

5 Working from home 'usually' in this context refers to working from home for half of the days in a reference period of the four weeks preceding the end of the reference week. Working from home 'sometimes' means working from home for fewer than half of the days worked, but for at least one hour during the four-week reference period.

Figure 1: Share of employees working from home, 2008–2021, EU27 (%)



Source: Eurostat [lfsa_ehomp]

frequency of teleworking increased abruptly to 19% in 2020, and rose further to 22% in 2021. The increase was recorded mainly among employees ‘usually’ working from home (Figure 1).

In terms of the evolution of telework by gender, 24% of women reported working from home at least some of the time in 2021, up from 8% in 2008. In 2021, some 21% of men were working from home, up from 7% in 2008.

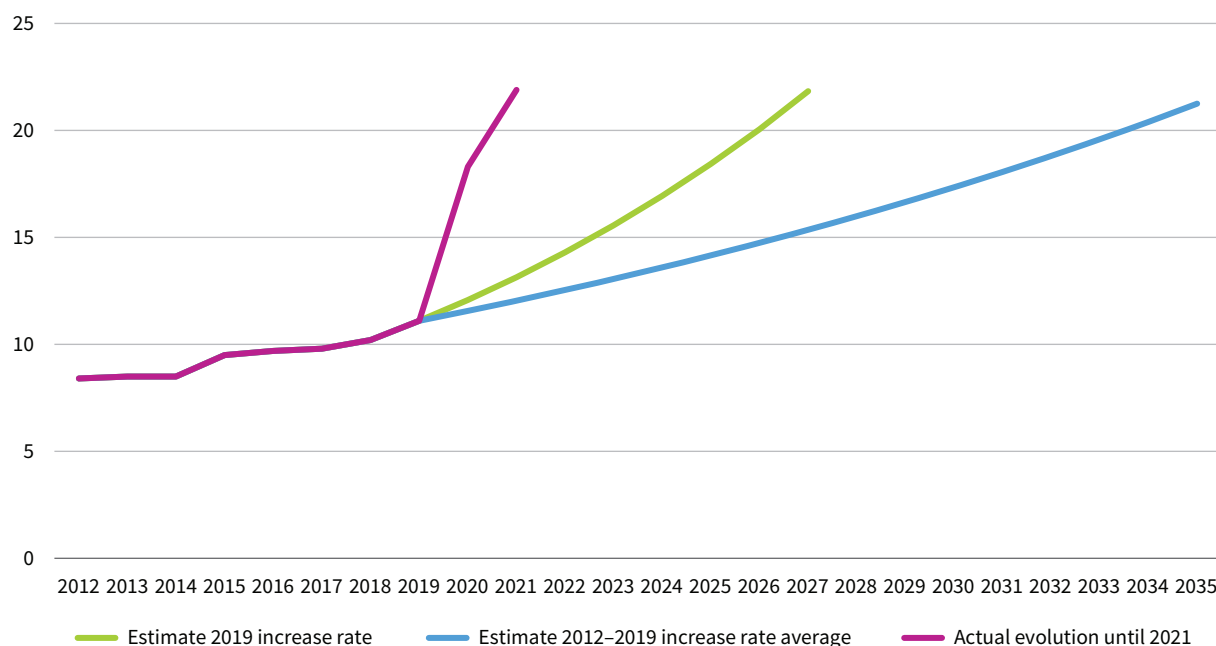
Before the COVID-19 pandemic, the main finding in terms of the share of employees working from home by age cohort was that older workers (aged 65 years and over) were much more likely to work from home than the average worker, while younger workers (aged 15–24) were much less likely to work from home than average. Trends of increasing prevalence over 2008–2019 were recorded for all age cohorts except those aged 65 and over. After the onset of the COVID-19 pandemic in 2020, this pattern continued, with sharp increases in the prevalence of telework in each of the working-age cohorts and a more modest increase among those

aged 65 and over. The sharpest relative increase was recorded for younger workers (aged 15–24) and core-age workers (aged 25–49). In 2021, around 12% of employees aged 15–24 reported working from home, compared with less than 3% in 2008 and 4% in 2019. However, multivariate analysis shows that young workers remained less likely to telework both before and during the pandemic (Annex 1).

The following analysis projects the long-term evolution of telework based on the average annual increase in the number of teleworkers between 2012 and 2019⁶ and the rate of increase between 2018 and 2019. This is a simple but clear estimation showing that it is likely that the number of employees teleworking in 2021 would not have been reached until 2027 had the pandemic not occurred. This would have happened even later if the growth rate had been the average between 2012 and 2019. Figure 2 shows the acceleration of telework prevalence that occurred as a consequence of the pandemic.

⁶ Annual increases have varied from 2012 to 2019, with the highest rate of increase between 2014 and 2015 (11%). Between 2018 and 2019, the rate of increase was 8%. Therefore, there was no linear increase in the yearly change across the whole period.

Figure 2: Simple projections of the share of employees working from home in a non-pandemic scenario, 2012–2035, EU27 (%)



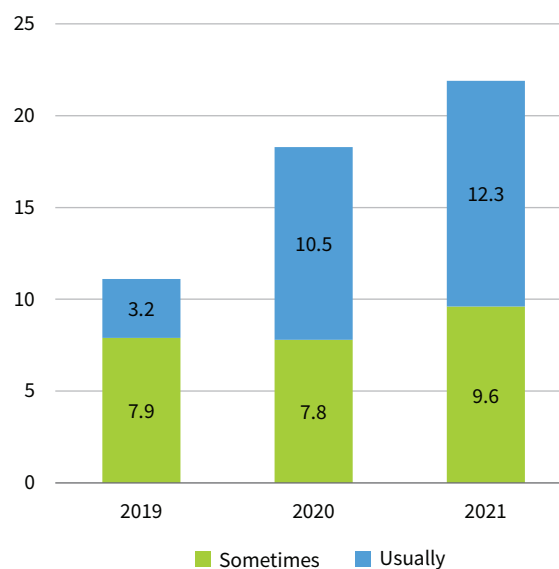
Source: Authors' elaboration, based on EU-LFS data from 2012 to 2021

Working from home during COVID-19

This section investigates the prevalence of working from home during the COVID-19 pandemic according to some variables of interest – demographics, occupation, education, employment characteristics and country – in the EU-LFS. These variables are useful in identifying groups of employees teleworking during the pandemic and therefore policies targeting telework.

The prevalence of telework is compared with the immediate pre-crisis baseline (2019).⁷ While there was an incremental increase over 2008–2019, the pandemic clearly induced a dramatic upward shift in the prevalence of working from home. This shift was mainly driven by the sizeable increase in the share of employees 'usually' working from home.⁸ Before the pandemic, around 11% of employees were working from home. In 2021, around 22% of employees were working from home at least some of the time (Figure 3). National lockdowns encouraged or imposed the use of regular telework and presumably pushed some occasional teleworkers to telework usually. However, as shown in Figure 3, the frequency pattern of working from home in 2021 did not significantly change compared to 2020.

Figure 3: Share of employees working from home, 2019–2021, EU27 (%)



Source: Eurostat [lfsa_ehomp]

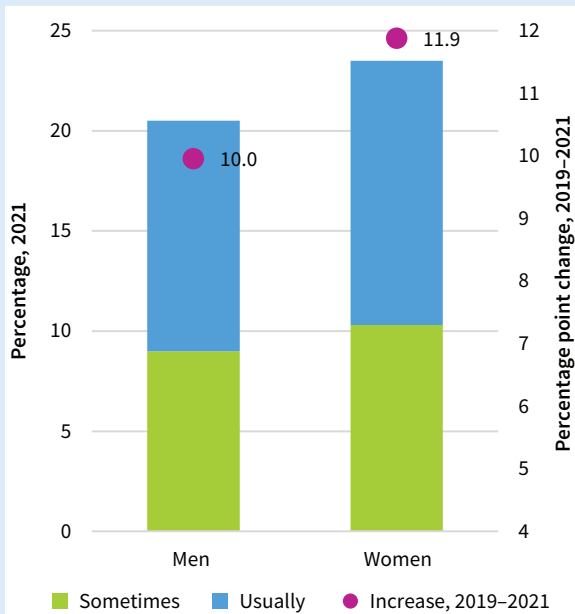
⁷ The data used for this analysis are a combination of the EU-LFS annual microdata that Eurostat makes available to the research community (data up to 2020 were disseminated in November 2021). They are updated, where possible, with the EU-LFS 2021 data published on the Eurostat website in May 2022. It is worth noting that the annual values for the main variable of interest in this analysis – 'working from home' (HOMEWK) – are based on average values over reference week samples collected throughout the year. Given that the pandemic began to affect European workplaces in mid-March 2020, the annual figures for the prevalence of working from home underestimate the actual prevalence, especially that which occurred during periods when the most severe public health measures were enforced, such as March–May 2020 and October–December 2020.

⁸ According to Table 1, the working from home 'usually' category in the EU-LFS is similar to 'full-time telework' or 'regular partial telework' in the EWCTS 2021 and to 'regular home-based telework' in the EWCS 2015.

Box 1: Working from home: Gender differences?

According to EU-LFS data, women were slightly more likely than men to work from home both before and during the COVID-19 pandemic. Figure 4 shows the increase in 2019–2021, largely attributable to the pandemic, was greater for women (11.9 percentage points) than for men (10 percentage points). Therefore, there was a modest positive gender gap in actual teleworking during the pandemic.

Figure 4: Employees working from home by sex, 2021 (%) and 2019–2021 (percentage point change), EU27



Note: ‘Increase, 2019–2021’ is determined from the combined responses ‘usually’ and ‘sometimes’ to the question asking how often respondents worked from home.

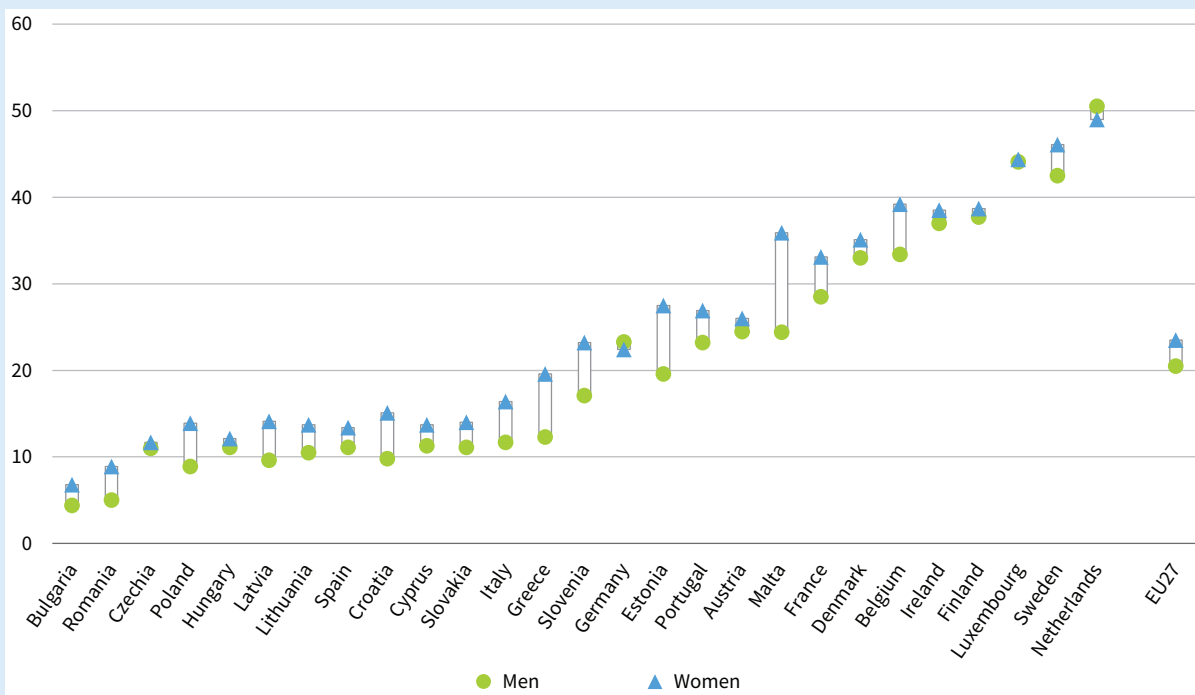
Source: Authors’ elaboration based on EU-LFS 2020 and 2021

In part, this is due to the greater teleworkability of jobs in which there is a high proportion of women (see the section below ‘Teleworkability: What occupations can be carried out remotely?’). Many women are employed in service industries, in roles that may lend themselves more readily to working from home. Conversely, a higher share of men work in the agriculture, construction and manufacturing sectors. Many jobs in these sectors have high physical or manual handling requirements, and therefore are location dependent and cannot readily be performed remotely.

An alternative explanation, but one that the data suggests was arguably less important than the above, is that women were more likely to decide to work from home during the pandemic because they (rather than their male partners) ‘took up the slack’ and combined work with domestic caring activities during periods of childcare service and school closures. The statistical analysis suggests that this aspect played a much smaller role in women engaging in telework (Annex 1).

If we look at the gender breakdown for 2021 (Figure 5), we see that women were more likely to be

Figure 5: Employees working from home by sex and country, 2021, EU27 (%)



Source: Eurostat [lfsa_ehomp]

working from home (either usually or sometimes) in all but two Member States. Men were more likely to be working from home only in Germany and the Netherlands.

Despite the slightly higher share of women teleworking, gender itself does not have a great impact on the prevalence of telework. Multivariate analysis shows that, all things being equal, women were more likely to telework, an effect driven by the significantly higher probability of women teleworking on a usual basis (Annex 1). The likelihood slightly increased during the pandemic (2020). However, the effect size is small. On average, among EU Member States, only 0.7% more women than men report that they usually telework. Even in countries where the difference between genders is wider, for example in Malta, Estonia and Greece, the gap is mostly rather small in magnitude (Figure 5).

Working from home during COVID-19 by age

During the pandemic, younger workers (those under 25 years old) were less likely to work from home than core-age (25–49 years) and older workers. Figure 6 shows that the share of those working from home was highest among those aged 65 and over (30%). Reflecting the longer-term trend reported above, the biggest rise in the prevalence of working from home, compared with the pre-pandemic period, was among core-age employees (just less than 11 percentage points).

Other drivers of teleworking during COVID-19

As noted previously by Sostero et al (2020), certain personal or work-related characteristics were strong markers of the likelihood of working from home before the pandemic. Workers who were paid more, with third-level degrees, working in white-collar service

occupations and/or working in densely populated metropolitan areas were much more likely to work from home.

The drivers for increased teleworking during the pandemic were the lockdowns, including both company and school closures. However, having children was not a driver. In 2020, **employees with children** were slightly more likely than those without children to report teleworking. The presence of children in the household, however, made little difference to the prevalence of working from home when comparing 2019 with 2020. Compared with the pre-pandemic period, the rise in the prevalence of teleworking during the pandemic was slightly greater for households without children (around 6.5 percentage points) than for those with children (6.3 percentage points), and this is mainly due to an increase in the number of employees regularly working from home.

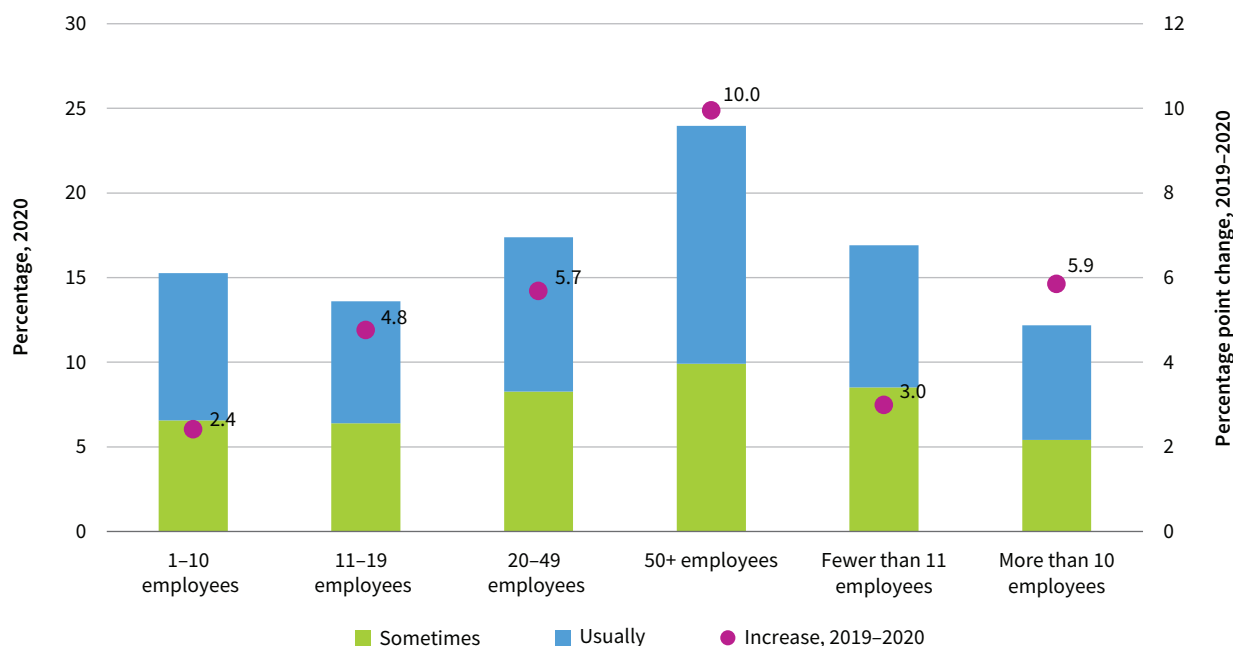
Figure 6: Employees working from home by age, 2021 (%) and 2019–2021 (percentage point change), EU27



Note: 'Increase, 2019–2021' includes the 'usually' and 'sometimes' categories for the variable 'working from home'.

Source: Eurostat [lfsa_ehomp]

Figure 7: Employees working from home by size of business, 2020 (%) and 2019–2020 (percentage point change), EU27



Note: Overlapping categories are due to different question formulations and answer categories in different EU Member States. ‘Increase, 2019–2020’ includes the ‘usually’ and ‘sometimes’ categories for the variable ‘working from home’.
Source: Authors’ elaboration, based on EU-LFS data

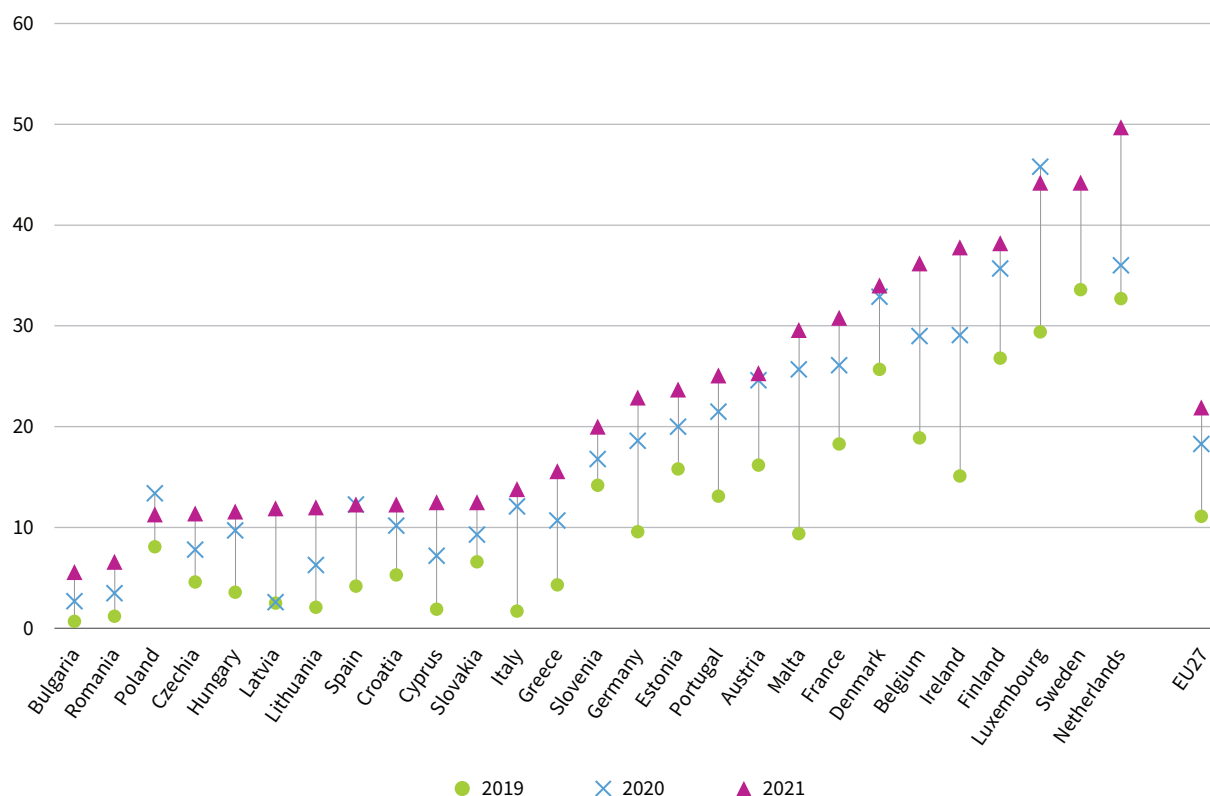
Employees in larger businesses were more likely to work from home than those in smaller ones (Figure 7). In 2020, almost 25% of employees in firms with 50 or more workers reported working from home. Compared with 2019, this was a 10-percentage-point increase, mainly due to a huge increase in employees regularly working from home. In microcompanies (companies with 1–10 workers), 15% of employees reported teleworking in 2020 (an increase of 2.4 percentage points compared with 2019). The increase in teleworking was less marked in small and medium-sized enterprises than in larger ones, which can probably be attributed to both greater availability of technological infrastructure and more pre-existing options for remote working in larger establishments. However, multivariate analysis shows that the pandemic has also mainstreamed telework among small firms (Annex 1). In 2020, there was also an increase in the probability that workers employed by small companies would be engaged in telework on a usual basis.

Before the COVID-19 pandemic the prevalence of **working from home varied widely from country to country** (Figure 8). In some countries, such as Bulgaria, Romania, Latvia, Lithuania and Italy, it was marginal or almost non-existent. By contrast, in Denmark, Finland, Luxembourg, Sweden and the Netherlands, over a quarter of employees reported working from home at least some of the time.

During the pandemic, the prevalence of working from home increased in all countries. In the Benelux and Nordic Member States and Ireland, between a third and half of employees reported working from home at least some of the time in 2021 (Figure 8). The smallest increases in percentage point terms occurred in countries where the prevalence of telework was rather low in 2019; however, given the low starting levels, the rates recorded in Bulgaria and Romania in 2021 (6% and 7%, respectively) still represent a five-fold increase from pre-COVID-19. The largest increases were recorded in smaller EU countries, notably Malta and Ireland (greater than 20-percentage-points increase between 2019 and 2021).

The fact that the significant increase in working from home that occurred between 2019 and 2020, at the outset of the pandemic, continued into 2021 is consistent with the extension of physical distancing measures into the second year of the pandemic. Differences in the speed of adaptation to remote working may be an additional contributor to the increased prevalence in 2021 compared with 2020, which was reported in all EU Member States except Poland and Luxembourg. In countries where the prevalence of working from home was low, such as Bulgaria, Romania, Latvia and Lithuania, but also in the country with the highest prevalence of working from home, the Netherlands, the bulk of the 2019 to 2021

Figure 8: Share of employees working from home by country, 2019–2021, EU27 (%)



Note: Sweden did not provide data on working from home in 2020.

Source: Eurostat [lfsa_ehomp]

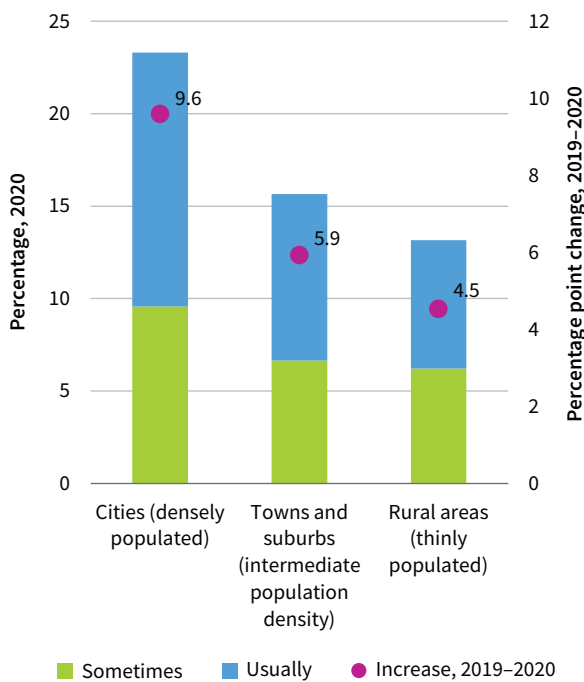
increase in working from home took place in 2021, the second year of the pandemic. By contrast, in Italy, the country with the first and most severe outbreak of COVID-19 in spring 2020, nearly the entirety of the increase in remote working during the COVID-19 period took place in 2020, with only a modest further increase in 2021.

As reported in Sostero et al (2020), **before the pandemic, working from home was much more likely in more densely populated metropolitan areas than in suburban and rural areas.** During the pandemic, the share of teleworkers increased more in cities than in other areas, based on the DEGURBA variable (see Figure 9).⁹ This relates partly to differences in employment structure: more densely populated

metropolitan areas are richer in the knowledge-based, white-collar services jobs that lend themselves to remote working, while in other types of locations, jobs that cannot be performed remotely are more common, such as agricultural labour in rural areas. The biggest increase in cities could also be influenced by the availability of digital infrastructure required for telework, for example, high-speed broadband is more commonly available in cities than in remote rural areas. Moreover, employees working in urban areas usually have longer commuting times than employees working in non-urban areas and are more likely to telework to avoid commuting. So, although the pandemic increased the prevalence of telework in both rural and urban areas, significant differences remain between cities and rural areas.

⁹ DEGURBA, degree of urbanisation. This EU-LFS variable differentiates between three settlement types with regard to their degree of urbanisation based on population density at local administrative unit level. The three categories are 'cities' (densely populated areas), 'towns and suburbs' (intermediate-density areas) and 'rural areas' (thinly populated areas).

Figure 9: Share of employees working from home by settlement type, 2020 (%) and 2019–2020 (percentage point change), EU27



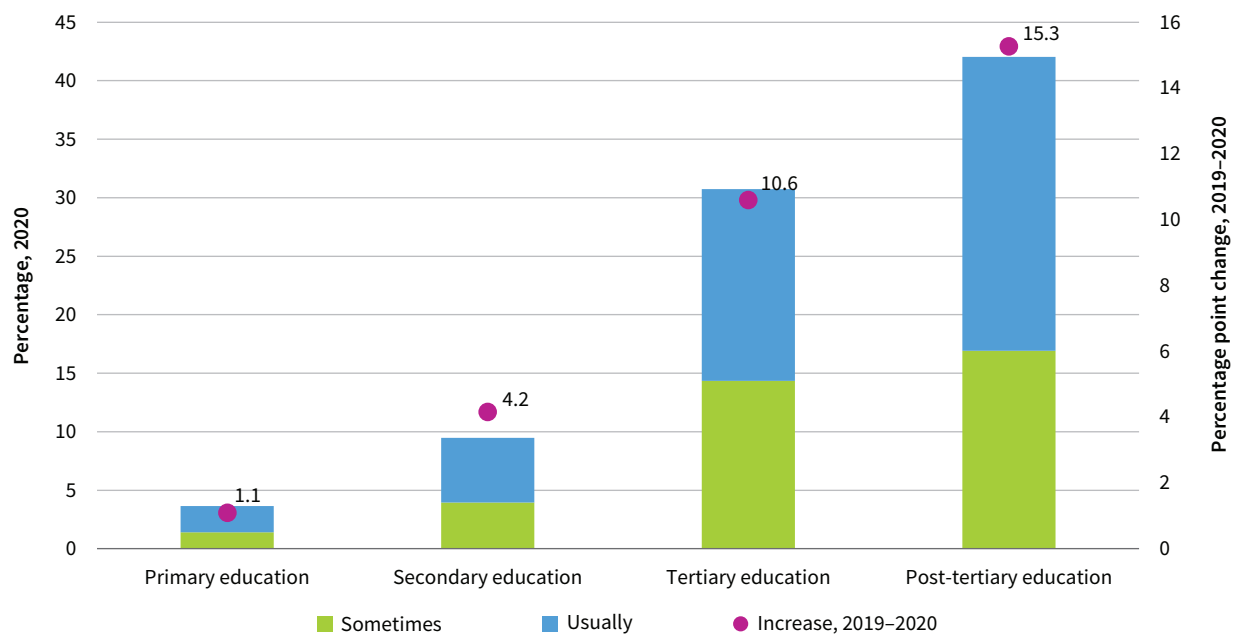
Note: ‘Increase, 2019–2020’ includes the ‘usually’ and ‘sometimes’ categories for the variable ‘working from home’.

Source: Authors’ elaboration, based on EU-LFS data

In relation to **employment status**, before the pandemic, full-time employees were marginally more likely to work from home than part-time employees, and during the pandemic this gap increased slightly. Permanent employees have tended to have slightly more opportunities to work from home than temporary employees, in part because working from home requires a degree of autonomy more likely to be extended as a privilege to those enjoying ‘core’ employment status.

In terms of **educational level**, more than 40% of employees with a post-tertiary level of education reported teleworking in 2020, while around 30% of those who have completed tertiary education worked from home at least some of the time, compared with less than 10% of those with secondary education and 4% of those educated only to primary level (Figure 10). The higher the level of education, the greater the increase in the prevalence of teleworking during the pandemic. Multivariate analysis shows that education and income have significant and large effects on the probability of teleworking (Annex 1). Furthermore, the pandemic has also amplified differences across income deciles.¹⁰

Figure 10: Share of employees working from home by level of education, 2020 (%) and 2019–2020 (percentage point change), EU27

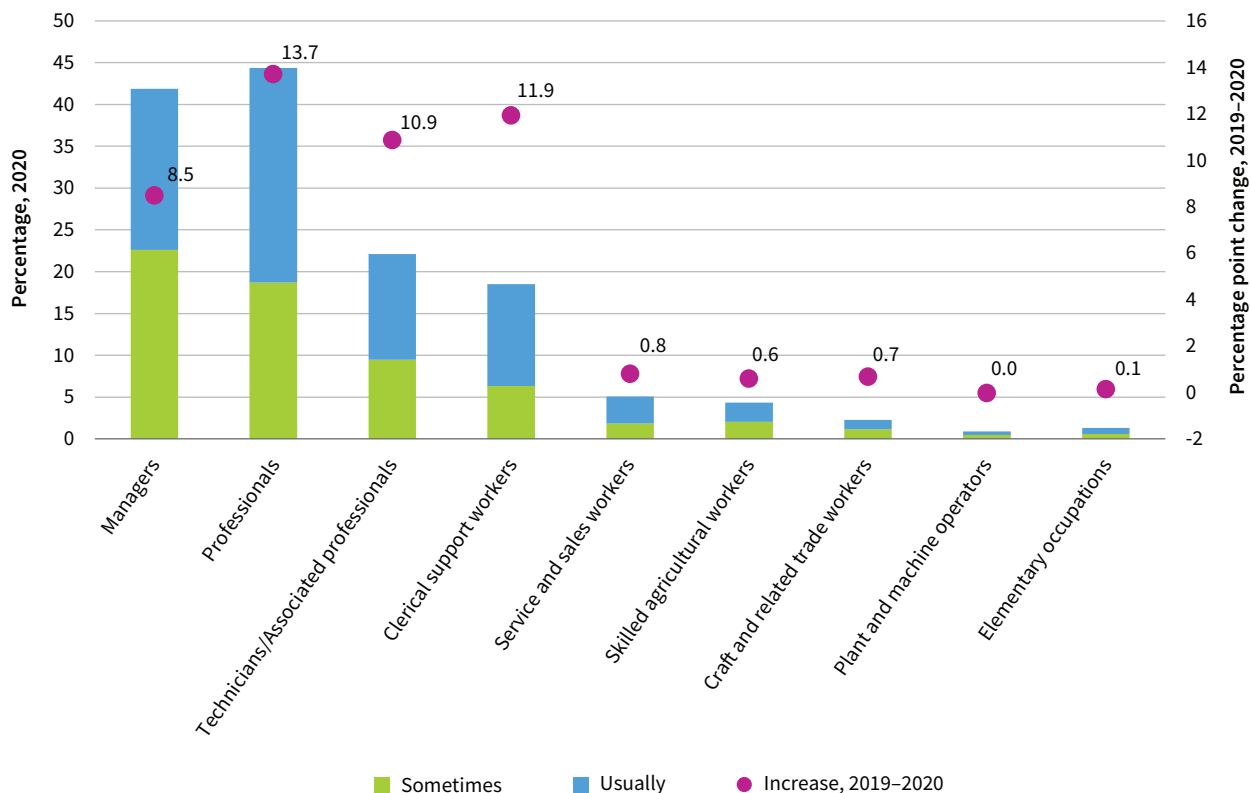


Note: ‘Increase, 2019–2020’ includes the ‘usually’ and ‘sometimes’ categories for the variable ‘working from home’.

Source: Authors’ elaboration, based on EU-LFS data

¹⁰ The income decile groups are 10 equally sized groups arranged so that each contains 10% of the population in ascending order of work income (gross pay).

Figure 11: Employees working from home by occupation, 2020 (%) and 2019–2020 (percentage point change), EU27



Note: 'Increase, 2019–2020' includes the 'usually' and 'sometimes' categories for the variable 'working from home'.
Source: Authors' elaboration, based on EU-LFS data

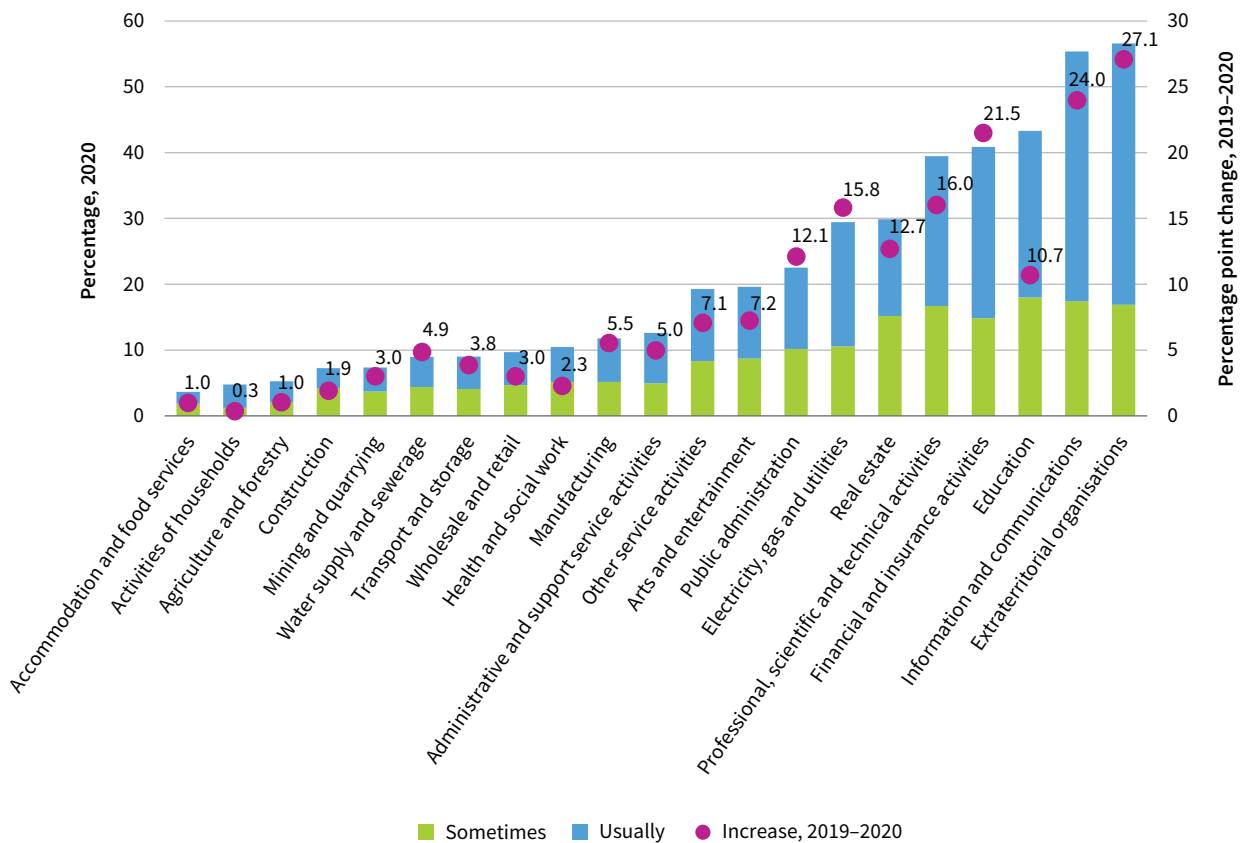
Teleworkability and working from home have very strong occupational gradients, which are related to educational level (Figure 11). In 2019, the share of teleworkers was very low among lower-level, blue-collar occupations, and the situation did not change much during the pandemic: the increase in working from home was marginal. Workers in elementary occupations, such as machine operators, agricultural workers, and service and sales workers, tend not to be eligible for telework. During the pandemic, the prevalence of working from home increased mainly among white-collar workers, especially among professionals (greater than 13 percentage points).

It is worth noting that, in the case of white-collar occupations, the prevalence of working from home increased not only among those at the highest level, but also, indeed to an even greater extent, among lower-level workers, who before the pandemic had been less likely than those at higher grades to work from home. For example, working from home increased among clerical support workers and associate professionals, whose work can be carried out remotely but who are typically younger and have a shorter length of service and therefore, before the crisis, were less likely to have been awarded the 'benefit' or 'privilege' of remote working.

Multivariate analysis also suggests that the likelihood of engaging in telework depends not only on the 'teleworkability' of occupations, that is whether they are more or less suited to telework, but also on employees' level of authority and their degree of autonomy and control (Annex 1). Previous, pre-pandemic research also found this (Eurofound and ILO, 2017).

During the pandemic, **the prevalence of working from home differed from sector to sector** (Figure 12). The greatest increases in the prevalence of working from home between 2019 and 2020 were in the service sectors. In 2020, the education sector had a high share of teleworkers, but in comparison with other sectors with a high prevalence of telework, the increase from 2019 to 2020 was relatively modest. Working from home during the pandemic was not very common in sectors with a high level of place-dependent work – accommodation and food services, construction (due to lockdowns and closures), agriculture, manufacturing and mining – where the possibilities of working from home are limited to a small number of white-collar occupations.

Figure 12: Employees working from home by sector, 2020 (%) and 2019–2020 (percentage point change), EU27



Note: 'Increase, 2019–2020' includes the 'usually' and 'sometimes' categories for the variable 'working from home'.
Source: Authors' elaboration, based on EU-LFS data

In conclusion, the acceleration of teleworking is extremely evident. The pandemic expanded telework among most categories of the workforce, including groups of employees that, before the pandemic, rarely teleworked, including mid- and low-skilled white-collar employees and employees from small companies. However, the overall picture regarding the distribution of telework remains predominantly the same: teleworking is widely practised by professionals, in knowledge-based sectors, in jobs with a high share of teleworkability, in urban areas and in Nordic countries. Finally, gender does not play a strong role in the uptake of telework, and lockdowns (as a driver of teleworking) have affected all employees, including those with and without children (despite school closures).

Teleworkability: What occupations can be carried out remotely?

The rise in the prevalence of remote working following the onset of the COVID-19 pandemic triggered many reflections on what occupations could potentially be carried out remotely and what job or task characteristics determine such 'teleworkability'. The following analysis is also relevant to forecasting the future of telework based on changes in occupational structures. Employment rates in teleworkable occupations, for example in the ICT sector, have increased recently, and it can be expected that the increase in teleworkable jobs will lead to an increase in the prevalence of telework.

From a task perspective, teleworkability is defined as 'the material possibility of providing labour input remotely into a given economic process' (JRC, 2020). The phrase 'material possibility' emphasises that teleworkability depends on technical feasibility, which is determined by the type of tasks that can be remotely undertaken with the technology available.

Based on their ‘teleworkability’, three broad categories of task types can be identified.¹¹

- **Information-processing tasks:** They can, in general, be carried out remotely with hardly any loss of quality and can be easily identified by their use of computers.
- **Social interaction tasks:** They do not require physical contact and can also be performed remotely but with a potential loss of quality.
- **Physical tasks:** Generally, they cannot be completed remotely with existing technologies and thus occupations in this category are restricted in terms of teleworkability.

Sostero et al (2020) estimated, based on 2018 EU-LFS data, that occupations accounting for 37% of dependent employment in the EU could be teleworked.¹² Updating this assessment with 2020 EU-LFS data, a small increase in overall teleworkable employment is observed, 38.5%. This small increase reflects the persistent impact of the pandemic on employment levels in sectors most affected by social distancing measures. These include many sectors where most employment is not teleworkable, for example, retail, accommodation and food and beverages (Eurofound and JRC, 2021). The increase in teleworkable employment also relates to the resilience and growth of employment share in white-collar, knowledge-intensive sectors, where most employment is teleworkable. The fastest-growing International Standard Classification of Occupations (ISCO) 2-digit occupation during 2018–2020 was that of an ICT professional, an archetypal teleworkable job. While marginal in percentage terms, the shift in employment structure between 2018 and 2020 resulted in a net increase of over 1.75 million teleworkable jobs in the EU.

The task profile of female employment lends itself much more readily to remote working than that of male employment, and women account for a significantly larger share of teleworkable employment than men (Sostero et al, 2020). In part, this reflects both the physical demands and the strongly place-dependent nature of some male-dominated jobs. For example, jobs in the agriculture, construction and manufacturing sectors, undertaken largely by men, tend not to be teleworkable for these reasons.

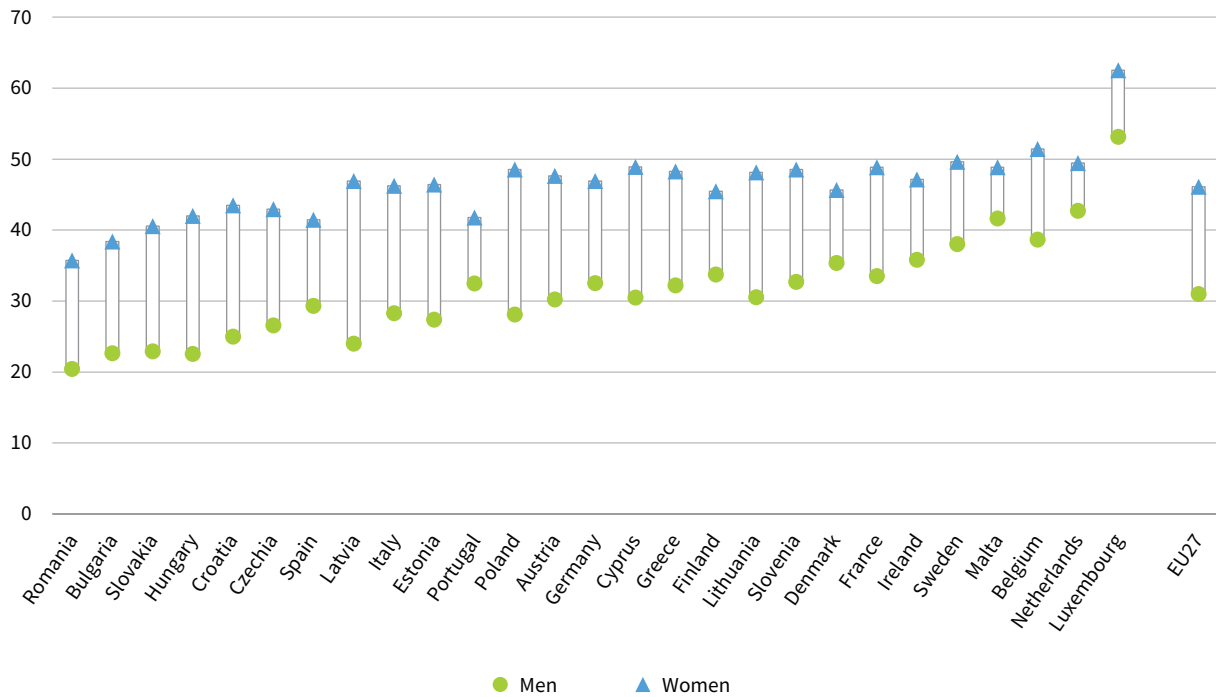
As noted in the previous section, in the EU, women were on average somewhat more likely (2 percentage points) than men to work from home during the pandemic. This was also the case before the pandemic. However, as Figure 13 shows, in 2020, 31% of male employees in the EU were in teleworkable jobs, compared with 46% of women; so there is a much larger gender difference in technical teleworkability than in the actual likelihood of working from home. In all countries, the gender gap in teleworkability is positive. The largest gender gaps are observed in Latvia and Poland.

Therefore, when considering the teleworkability of tasks and the actual likelihood of teleworking, it can be concluded that other factors play a more important role than gender in determining whether or not an employee teleworks. In fact, the teleworkability of the occupation has a larger effect, which in a multivariate analysis is reflected by the variables occupation and sector (Annex 1).

11 For the definition of task, please see Eurofound (forthcoming-a).

12 For the purposes of the occupational index of teleworkability developed by Sostero et al (2020), the sole determinant selected is the absence of tasks requiring physical operation. The main technical teleworkability index is therefore negatively determined, that is by the absence of physical task content in an occupation. The extent to which jobs are information-processing intensive has no bearing on their main teleworkability index score (although, of course, it is precisely these types of tasks that lend themselves most to remote working and, in practice, there is a high correlation between the intensity of computer use – a good proxy of information-processing task intensity – and teleworkability). Similarly, the extent to which jobs involve social tasks does not determine their technical teleworkability.

Figure 13: Share of employees in teleworkable employment by sex and country, 2020, EU27 (%)



Note: Includes dependent employment only.
 Source: Authors' elaboration, based on Sostero et al (2020) and EU-LFS data

Some jobs are more teleworkable than others

The estimate that 38.5% of dependent employment in the EU is teleworkable (or employment with some degree of teleworkability) can be considered an upper-bound estimate. It includes many occupations that may have a high share of tasks requiring social interaction and where remote working may be less than ideal. Digital communications have greatly expanded the possibility for remote social interaction. There is still, however, significant information loss compared with face-to-face social interaction; for example, small time lags in sound transmission or background noise may be disruptive, and gestures and other forms of non-verbal communication are likely to be lost (Schoenenberg et al, 2014).

The taxonomy of social interaction tasks developed by Fernández-Macías and Bisello (2020) provides some examples of social tasks that can be performed remotely but with a loss of quality, such as teaching, selling, negotiating, caring and coordinating. Examples of occupations that fall into this category include schoolteacher and psychotherapist. In both occupations, the share of tasks requiring social interaction is very high although there is no actual requirement for physical presence.

Where an occupation is teleworkable and involves only limited social interaction, it should in principle be capable of being carried out with no or limited loss of quality. Prospectively, it is these occupations that can be expected to benefit soonest and to the greatest

extent from any general increase in teleworking after the COVID-19 pandemic. Conversely, in occupations that are rich in social interaction tasks, such as secondary school teacher, the expectation would be that in normal times most work, while technically teleworkable, would take place in its traditional location in schools and classrooms, as indeed has occurred as COVID-19 restrictions have abated.

In order to distinguish between jobs that are teleworkable with little or no loss of quality, that is, predominantly dealing with intellectual tasks, involving intensive computer use and with limited requirements for social interaction, for example statisticians or financial analysts, and those that can be performed remotely but whose higher share of social tasks means that remote working is not ideal, Sostero et al (2020) developed a secondary axis measuring the social task intensity of each ISCO 3-digit occupation. With this additional distinction, we can discriminate between jobs that are 'highly teleworkable', that is technically teleworkable and involving limited social interaction tasks, and those that are technically teleworkable but with a loss of quality given the extensive involvement of social tasks. A full chart showing both physical teleworkability index values and social interaction index values for all 120 ISCO 3-digit occupation categories is included in the working paper *Telework and teleworkability during COVID: An analysis using LFS data* (Eurofound, 2022b), along with a country breakdown for the three tables. Table 2 provides a summary with selected occupation titles.

Table 2: Share of teleworkable employment, 2020, EU27 (%)

Teleworkability	Share of EU27 employment	Sample occupations
Highly teleworkable	17.2	Numerical clerks Database and network professionals Finance professionals General office clerks Authors, journalists and linguists ICT professionals
Teleworkable but with difficulty due to social task content	21.3	Secondary education teachers Managing directors and chief executives Professional services managers Social and religious professionals Sales, marketing and public relations professionals Regulatory government associate professionals
Not teleworkable	61.5	Childcare workers Cooks Heavy truck and bus drivers Manufacturing labourers Veterinarians Nursing and midwifery associate professionals

Note: ‘Highly teleworkable’ means physically teleworkable and a score of ≤ 0.5 on the social interaction task scale. ‘Teleworkable but with difficulty’ means physically teleworkable and a score of > 0.5 on the social interaction task scale. See Table A2 in the working paper ‘Telework and teleworkability during COVID: An analysis using LFS data’ (Eurofound, 2022b) for the relevant index scales. See Sostero et al (2020) for the original data sources and details on the elaboration of the indices.

Source: Authors’ calculations, based on Sostero et al (2020) and EU-LFS data

Highly teleworkable occupations include numerical clerks, ICT professionals, authors and general office clerks. This category includes both occupations with a relatively high prevalence of teleworking before the pandemic, such as ICT professionals and finance professionals, and some with a relatively low prevalence, such as clerical workers.

Occupations that are teleworkable but with difficulty due to social task content comprise jobs that are physically teleworkable but that require a lot of social interaction. Providing services remotely is likely to be less than optimal, both for the worker and for the public or the client. This accounts for the majority of technically teleworkable employment, and just over one in five of all jobs. This category includes many managerial jobs – generally rich in social interaction tasks – and other people-facing professions, such as teaching.

Jobs that are not teleworkable account for the majority of employment (61.5%). Jobs that involve physical tasks, such as plumber, nurse, cook or veterinarian, must be carried out at the premises of the employer or customer and therefore remote working is not an option.

Most jobs are not currently teleworkable and in many of those that are teleworkable, remote working is less than ideal because a high share of tasks require social interaction. In addition to the gender teleworkability

gap already described, there are other stark differences in the share of teleworkable employment by education level and occupational category.

In relation to education, nearly three-quarters (73%) of employees with a third-level qualification worked in teleworkable occupations in 2020, compared with less than a third of those who had completed only secondary education (28%) and only 12% of those with more basic qualifications. White-collar occupations tend to have a much higher share of teleworkable employment than blue-collar occupations, only a very small share of which (0–2%) can be worked remotely given their physical requirements.

EU-LFS data for the first year of the pandemic (2020) show only a partial expansion of telework among lower-skilled white-collar occupations. This hierarchical bias in the prevalence of teleworking persisted, with the share of lower-skilled white-collar employees working from home being less than half of that observed for higher-skilled white-collar employees. This was despite the fact that all managerial occupations were assessed in Eurofound’s extended categorisation of teleworkability as ‘teleworkable but with difficulty’ because of their high share of social interaction tasks. An additional explanation could be that in some sectors with a considerable share of lower-skilled white-collar employees, businesses were closed due to the lack of operations on site.

As reported in the previous section, occupational hierarchy remained a determinant of the likelihood of employees working from home even during the pandemic.

Another conclusion based on the previous descriptive analysis is that the actual prevalence of working from home in 2020 was only around half of the rate that was technically feasible. Even during the pandemic, when working from home was widely enforced, the potential for remote working was somewhat greater than the actual prevalence. However, there is a close correspondence between the ‘highly teleworkable’ employment share and the prevalence of working from home in 2020. Structural changes in the composition of employment, notably the increasing role of the service sector and occupational upgrading, with increased employment in higher-quality and higher-paid jobs, imply that this band of teleworkable employment is expanding. The pandemic, as already noted, has given further impetus to these shifts. This means that a growing share of employees will be doing work that can be carried out remotely. Therefore, structural changes in employment will be a driver of the increasing prevalence of telework in the EU.

In the next section, the wage and employment inequalities between occupations with varying degrees of teleworkability are explored, as is the role played by the pandemic in exacerbating these inequalities.

Teleworkability: Exploring wages and employment outcomes

The pandemic has had a notable impact on European labour markets. In 2020, the most important, immediate effects of the pandemic were declining labour market activity and employment. In this section, the research explores how potential teleworkability could be related to inequalities in wages and employment.

As noted in previous sections, the increase in teleworking as a result of the pandemic has been skewed towards employees in the most privileged employment positions: highly paid, white-collar workers. The pandemic has resulted in a divide between those who can telework and those who cannot, the former being better prepared to maintain their employment, working hours and income levels during hardship (JRC, 2020). In Germany, regression studies have identified a significant wage premium among those able to work from home (Irlacher and Koch, 2020). Microsimulation exercises have shown that lockdowns result in growing wage disparities within the workforce (Brunori et al, 2020; Palomino et al, 2020).

Although available data do not yet permit an empirical analysis of actual wage disparities across EU countries in 2020, the results presented in this section show that

employees in more teleworkable occupations are paid much more and were much better placed to weather the negative impact of the COVID-19 pandemic on European labour markets. This suggests that the impact of the economic shock brought about by the pandemic was not the same throughout the workforce and could have resulted in growing disparities. These disparities should be monitored once EU-level microdata on wages covering the years of the pandemic become available.

The empirical approach presented here relies on the teleworkability index introduced in the previous section, by which it is possible to classify occupations (at ISCO 3-digit level) into three categories: non-teleworkable, somewhat teleworkable and fully teleworkable. Once employees are classified into one of these three categories depending on their occupation, the analysis conducted explores how their wages compare and how their employment levels were affected during the economic downturn in 2020.

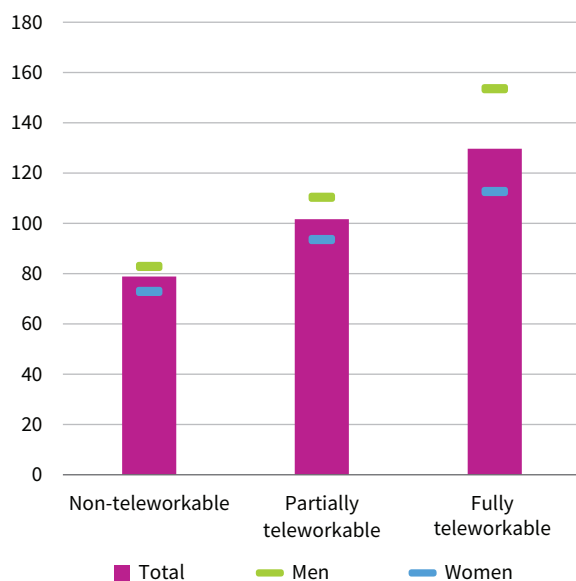
Teleworkable occupations are associated with higher wages

This section presents data on wage levels across the EU workforce depending on the degree of teleworkability of the occupational category of employees. Figure 14 presents data for the EU as a whole in 2018 and shows how employees working in fully teleworkable occupations earn on average the highest wages, while employees working in occupational categories that are not teleworkable earn on average the lowest wages. This is true for both male and female employees, although it is somewhat more evident among men, as illustrated by the larger wage gap between men and women among employees working in the most teleworkable jobs.

Results at country level reinforce the robustness of this association between teleworkability and average wage levels. Wage gaps between fully teleworkable and partially teleworkable occupations and between partially teleworkable occupations and non-teleworkable occupations exist in all EU Member States, although the size of the gaps varies across countries (where data are available at ISCO 3-digit level). This analysis relies on wage microdata from 2018, the latest available round of Eurostat’s Structure of Earnings Survey, made available to researchers in late 2021. There are as yet no more up-to-date data available to cover the labour market dynamics in terms of teleworkability and wage levels during the COVID-19 pandemic, starting in 2020.

Nevertheless, these results suggest that the pandemic may have indirectly led to a new dimension of wage inequality within European labour markets. As occupations that were more teleworkable were already characterised by much higher wages, the relatively privileged position of these employees compared with

Figure 14: Average wage levels by degree of teleworkability and sex, 2018 (average wage levels in 2018 are equal to 100), EU27



Note: Wage levels are expressed as a ratio obtained by dividing the wage of each employee by the mean hourly gross wage at national level, so that a value of 100 would equal the average wage in each country. The EU27 aggregate excludes Belgium, Croatia, Finland, Germany, Hungary, the Netherlands, Portugal, Romania, Slovenia, Spain and Sweden, where wage data at ISCO 3-digit level are not available. The sample includes all employees working in occupations for which information on the teleworkability index is available at ISCO 3-digit level.

Source: Authors' elaboration, based on data from Eurostat's Structure of Earnings Survey 2018

those working in non-teleworkable occupations would have been reinforced if the former had fared better during the pandemic.

Teleworkable occupations fared much better during the pandemic

This section presents recent employment changes across the EU workforce depending on the degree of teleworkability of their occupational categories. The results clearly indicate that employees in teleworkable occupations fared much better in weathering the negative consequences of the pandemic than those in non-teleworkable or partially teleworkable occupations.

Figure 15 shows, for the EU as a whole, changes in the number of people employed between 2018 and 2019, that is before the pandemic (Figure 15a), and between 2019 and 2020, the first year to reflect the effects of lockdowns (Figure 15b) by gender and occupational teleworkability. The data clearly reflect the change in trends caused by the pandemic.

It can be seen from Figure 15 that, between 2018 and 2019, against a background of expansion of EU labour markets, employment growth was higher among employees working in non-teleworkable occupations and, to a lesser extent, fully teleworkable occupations than among those working in partially teleworkable occupations. This pattern of change in employment structure is consistent with the trend observed in recent years of economic expansion in Europe, during which stronger employment growth has been observed among the highest- and lowest-paid jobs in relation to mid-paid jobs (Eurofound, 2019).

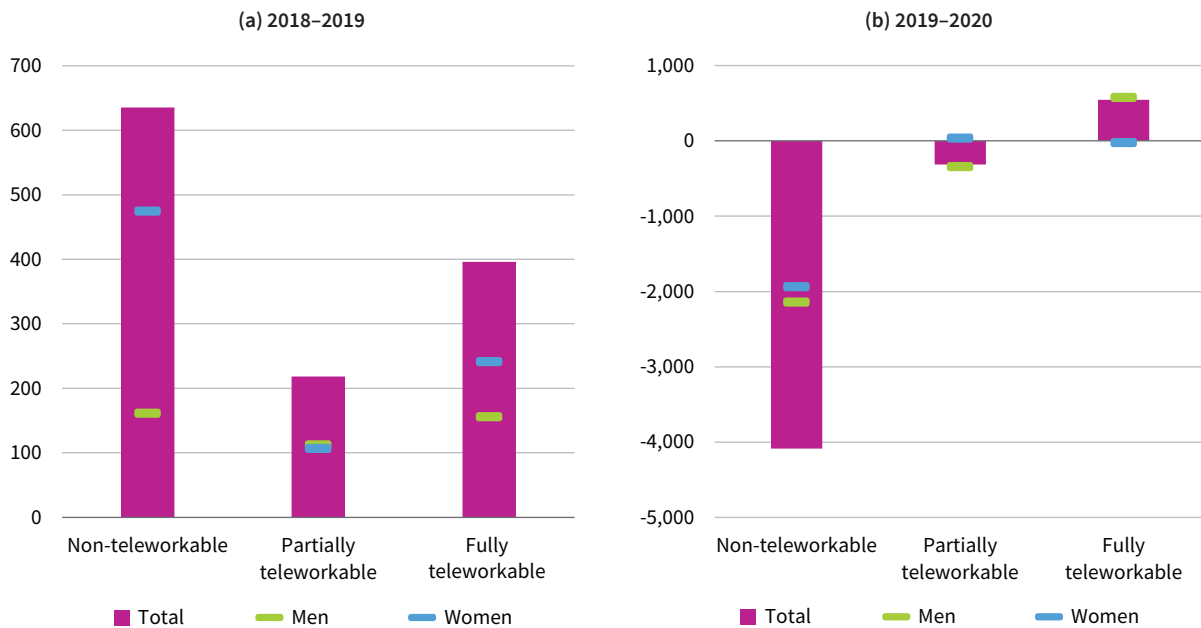
These employment dynamics were greatly modified by the effects of the COVID-19 outbreak. The pandemic's negative impact on employment in European labour markets was not evenly distributed across the workforce: the net job losses registered between 2019 and 2020 occurred almost exclusively among employees working in non-teleworkable occupations (and to a much lesser extent among employees working in partially teleworkable occupations, mainly those with very low degrees of teleworkability). Employees in fully teleworkable occupations weathered the impact of the pandemic much better and their employment levels continued to expand, though to a lesser extent than before the crisis.

Moreover, Figure 15 reveals an interesting gender dimension in the evolution of employment. In 2019, the very large increase in the number of employees in non-teleworkable occupations (and to a lesser extent in the number of employees in fully teleworkable occupations) was mostly due to an increase in female employment.

In 2020, despite the huge impact of the pandemic on service activities, an area in which women are more likely to work, overall levels of employment did not decrease more among women than among men. Nevertheless, the data show that employment losses among employees in non-teleworkable occupations were almost as large for women as for men, despite the former representing a smaller share of the workforce. This reflects the strong impact of the pandemic on the employment of low-paid women, many of them working in non-teleworkable jobs in sectors, such as accommodation, retail or cleaning services, that were most affected by the closures caused by COVID-19 in 2020.

On the other hand, the employment expansion registered among employees in fully teleworkable occupations in 2020 was exclusively due to net employment gains among male employees.

Figure 15: Absolute change (thousands) in employment levels by occupation’s degree of teleworkability and sex, 2018–2019 (a) and 2019–2020 (b), EU27



Note: The EU aggregate has been excluded. The sample includes all employees working in occupations for which information on the teleworkability index is available at ISCO 3-digit level, which means the employment changes depicted do not capture the full extent of European labour market developments. The EU aggregate excludes Bulgaria, Malta, Poland and Slovenia, owing to data unavailability.
Source: Authors’ elaboration, based on EU-LFS data

Country-level data show that the abovementioned uneven impact of the pandemic across the workforce was generalised across EU countries. Employees in non-teleworkable occupations carry the greatest burden of the employment losses across virtually all EU countries. While trends in employment among employees working in partially teleworkable occupations are mixed, employees working in fully teleworkable occupations continued to register net employment gains during 2020 in most EU countries.

However, labour shortages due to the COVID-19 pandemic have been particularly severe in many hospitality and service sectors, where wages are traditionally low and where the social interaction requirements of the jobs make them less suited to remote working. This is one manifestation of what has been referred to as the ‘great resignation’, the large number of voluntary resignations by workers in the United States, which has generated upward pressure on wages in low-paid jobs. In the United States, for example, where wages have been stagnant for low-paid workers for a generation, recent evidence (Economic Policy Institute, 2021) points to unusually robust wage growth in 2019–2020 for those in the bottom two wage deciles.

This could be part of a revalorisation of the tasks that cannot be conducted remotely and proved essential during the pandemic, including front-line services in the

health, care and retail sectors and others. Increasing wages for those in non-teleworkable jobs may also arise as a form of ‘compensating differential’ for their lack of teleworkability.

At the same time, broader structural trends, for example skill-biased technological change, point to a relatively greater employment demand (and larger wage increases) for those with higher-level skills in teleworkable employment. The impacts of increased teleworking on wage inequality are therefore not possible to predict. The final effect of such trends is a matter of empirical analysis that will be possible only when wage microdata covering the years of the pandemic and their aftermath become available.

In conclusion, the pandemic has made it clear that teleworkable jobs will be better insulated from future shocks, for example in relation to energy, natural disaster, health or war, leading to the promotion of teleworking. This finding, combined with the higher wages enjoyed by more teleworkable occupations, suggests that employees who are able to telework are in a more privileged position as regards job security and wages than those in non-teleworkable occupations. Moreover, they may enjoy better conditions because of the overrepresentation of high-skilled workers, which may result in work–life balance improvements, as discussed in the next chapter.

2 Impact of teleworking on working conditions

This chapter analyses the working conditions of employees teleworking during the pandemic using national reports¹³ received from the Network of Eurofound Correspondents and the EWCTS 2021. Table 3 outlines the different categories of telework that are considered in the analysis of the EWCTS. All telework categories are based on how often the respondents worked from home during the pandemic, during periods where lockdowns were imposed and lifted, which varied between countries. Both ‘full-time telework’ and ‘partial telework’ (including hybrid work) are characterised by teleworking on a usual or regular basis, while ‘occasional telework’ is characterised by lower frequency and is normally more sporadic in practice. The term ‘partial telework’ is used in general to refer to arrangements where employees often work from home and other places, while ‘hybrid work’ refers to the situation where employees work often from home and at least sometimes from the office. It is also important to note that the time reference of the question asking respondents about their place of work is one year.¹⁴

The findings from the Network of European Correspondents and the EWCTS 2021 are complemented with an analysis of the Eurofound’s *Living, working and COVID-19 e-survey* conducted in 2020 and 2021 and published in the article, ‘*Workers want to telework but long working hours, isolation and inadequate equipment must be tackled*’ (Eurofound, 2021a), and pre-pandemic Eurofound research on telework.

The topics addressed in this chapter include the organisation of working time, the monitoring of work, work relationships and the implications of telework for work–life balance, health and safety, and well-being in general. These topics highlight differences between telework and working from the employer’s premises and are somehow challenging or problematic (Eurofound and the ILO, 2017; Eurofound, 2019, 2020a, 2020b). Moreover, most of them are working conditions that have been subject to discussion by social partners and policymakers at EU or national level.

Table 3: Telework categories based on the EWCTS 2021

Telework category	Conditions for inclusion in the category
Full-time telework	Employees always working from home.
Partial telework (includes hybrid work)	Employees often working from home. This group includes hybrid workers who are employees often working from home and working from their employer’s premises at least sometimes.
Occasional telework	Employees rarely or sometimes working from home.
Employer’s premises (some degree of teleworkability)	Employees always working from their employer’s premises in jobs with some degree of teleworkability.
Employer’s premises (non-teleworkable jobs)	Employees always working from their employer’s premises in non-teleworkable jobs.

Source: Authors’ elaboration, based on EWCTS 2021 data

Organising working time, connecting and disconnecting during the pandemic

Telework has implications for working time, including its distribution, duration and definition. Previous Eurofound research has shown the differences between telework and work only carried out at employers’ premises in relation to long working hours, working time flexibility and irregular working hours (Eurofound, 2017, 2019 and 2020). In this section, findings from the pandemic period are presented, including key aspects such as the ability of workers to disconnect outside working hours.

¹³ The national reports were used to produce the Eurofound working paper *Working conditions during the pandemic and future challenges* (Eurofound, 2022c).

¹⁴ The EWCTS 2021 asks about the frequency of working from home during the 12 months before the survey and therefore results could be different in surveys asking about a different time of reference. For example, Eurofound’s *Living, working and COVID-19 e-survey*, the EWCS 2015 and EU-LFS refer to the previous week or to the previous four weeks.

Longer working hours

There is a large body of empirical evidence from across Europe that suggests that workers in telework arrangements during the COVID-19 pandemic period (March 2020 until the end of 2021) worked a longer number of unusual hours, for instance, working outside a 9:00 to 17:00 schedule, than they worked from the office before the crisis and than the standard working hours agreed in collective agreements or stated in individual contracts. This change confirms previous findings showing that there is a higher likelihood of employees working longer hours when working remotely (Eurofound and ILO, 2017; Gschwind and Vargas, 2019; Eurofound, 2019, 2020d). Therefore, it can be expected that those who worked from their employer's premises before the pandemic experienced an increase in the number of hours they worked when they changed to remote work.

Examples of this pattern are found in a number of European countries. Studies from Belgium, Croatia and Germany suggest that approximately half of the interviewed teleworkers reported working more hours than before the pandemic (Hans-Böckler-Stiftung, 2020; Acerta, 2021; Huršidić Radulović et al, 2021). Similarly, in Ireland, around half of teleworkers (49.3%) reported in July 2020 that long hours were a feature of working from home, with respondents working an average of nine extra hours in addition to their contracted weekly working hours (Mental Health First Aid Ireland, 2020). In Portugal, almost half of workers (48%) stated that their working time increased when teleworking (33% reported that they worked longer hours and 15% worked much longer hours), and only 10% said that they worked fewer hours (Pereira et al, unpublished). Meanwhile, in a French survey conducted in 2021, 63% of the teleworkers felt that they worked longer hours than before the pandemic, and 26% said they worked a lot more hours (Anact, 2021).

In Italy, a survey conducted among employees of national research centres in the second quarter of 2020 reported that around 40% of the respondents worked more while working remotely, while less than 20% of the respondents claimed to have worked less (Cellini et al, 2020). In a separate survey conducted in Italy, 39% of the respondents experienced more days where they worked longer hours (more than 10 hours) than when working at the office (Azzolari et al, 2021).

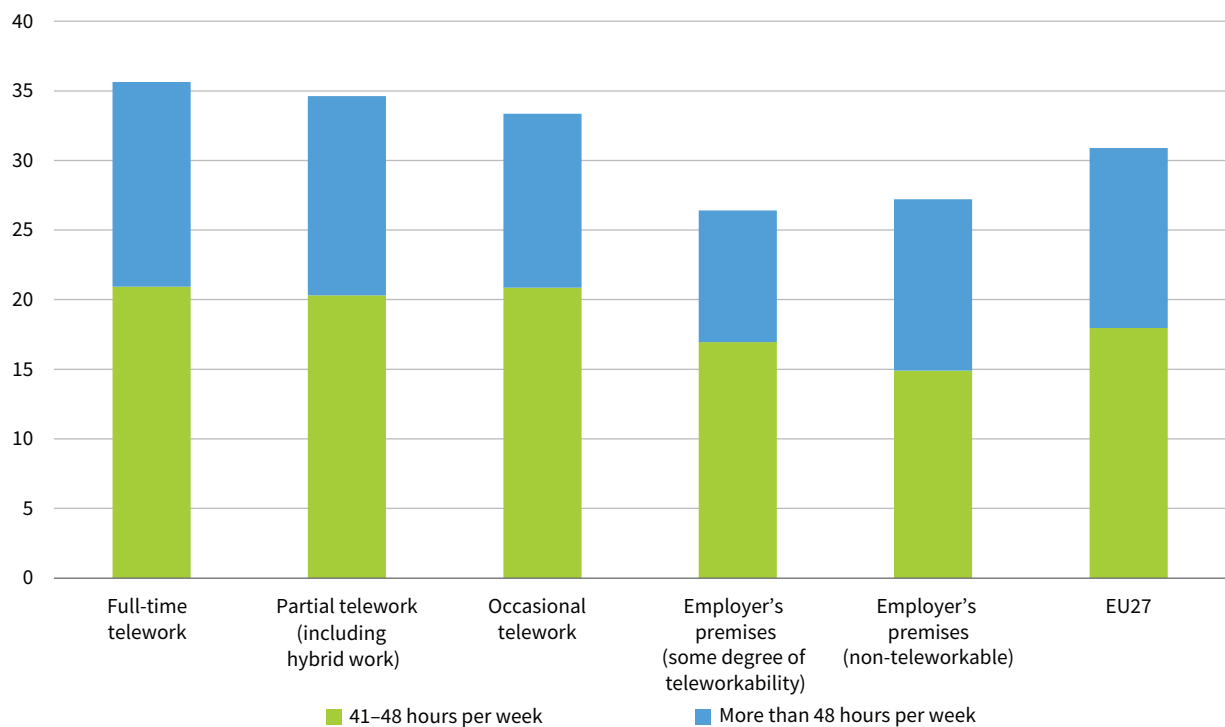
In Luxembourg, a survey found that teleworkers worked an average of 6–10 hours more per week than on-site workers (Schütz and Thiele, 2020). In the Netherlands, 74% of experts consulted suggested that many workers who work from home experience longer working days and take shorter and/or fewer breaks (TNO, 2021a), and a Swedish report suggests that teleworkers reported working longer hours than before the pandemic because they felt the need to keep their work computers on outside core working hours (Sveriges Ingenjörer, 2020).

Despite the large body of evidence suggesting that telework during the pandemic resulted in longer working hours, some research does not support this trend. A study in Denmark, for instance, did not find that working hours had increased during the pandemic. This is probably explained by the existing work culture and long history of teleworking in the country (Rockwool Foundation, 2021). In a Greek survey, 42.1% of respondents reported that they worked fewer hours per day during the lockdown than they did before the pandemic; by comparison, only 19.2% reported working more hours (Vatavali et al, 2020). A Swedish report shows that the majority of teleworkers (57%) worked the same number of hours in 2020 as before the pandemic, while 20% worked longer hours and another 20% worked fewer hours, with half of them stating that this was because their employer reduced their working hours (Andersson et al, 2020).

In March 2021, at EU level, and based on Eurofound's *Living, working and COVID-19 e-survey*, a higher share of respondents working from home during the pandemic worked long hours – between 41 and 60 hours per week – than employees working only at their employer's premises (35% of those working only from home, 27% of partial teleworkers and 19% of those working only at their employer's premises). This was the case for both 'new' teleworkers and those who had teleworked from home before the pandemic (Eurofound, 2021a).

The EWCTS 2021 shows differences between employees teleworking (with different frequencies) and those working only at their employer's premises during the pandemic (Figure 16). Those teleworking are more likely to report working more than 40 hours a week. Interestingly, the difference between the two groups is higher for the range between 41 and 48 hours than for working more than 48 hours.

Figure 16: Share of full-time employees working long (weekly) hours by telework arrangement, 2021, EU27 (%)



Source: EWCTS 2021

Only small differences exist between employees in different telework arrangements, that is between those always working from home (full-time telework) and those who telework with lower frequency (partial telework or occasional telework). However, when the specific group of hybrid workers is considered separately (those working from home and the office only), this arrangement has the lowest share of employees working long hours (29%) among all telework arrangements. Just over 35% of those working full-time from home report working long hours. This finding suggests that hybrid work might produce better results than full-time telework in terms of avoiding working long hours.

When considering a shorter temporal scope (weekly hours during the previous month), results from the Eurofound's *Living, working and COVID-19* e-survey showed a correlation between weekly hours worked from home and the total working hours (Eurofound, 2021a). The more an employee worked from home during a certain week, the longer the total number of working hours.

Working time autonomy and flexibility, but risk of non-standard and irregular hours

In the remote work environment, working time can become more flexible. At first glance, this may appear to be a benefit for teleworkers, however, flexible working time may also increase employees' risk of working longer hours and working at unusual hours, for instance, working outside a 9:00 to 17:00 schedule. A large body of evidence suggests that employees were more likely to work unsocial and irregular hours during the pandemic. Over half of Austrian employees (54%) stated that during the lockdowns they worked at times they usually would not, for example, late in the evening or at night, or at the weekend (IFES, 2020). In Belgium, half of teleworkers reported that they still worked after 18:00 (ACV Puls, 2021). Among respondents to a survey of company representatives carried out in Germany, 66% thought that employees teleworked more often during unusual hours and 30% thought that they worked more often at the weekend (Hofmann et al, 2021). In Italy, in March to May 2021, 31% of teleworkers worked more Saturdays than they did before the pandemic, and 18% worked more Sundays (Azzolari et al, 2021). In Portugal, 38% of workers reported that they often or always worked outside core working hours (Pereira et al, unpublished).

Evidence from several countries also shows that telework has led to greater working time autonomy, allowing teleworkers to schedule their work hours to fit their personal circumstances.

Italian research shows that 69% of teleworkers were able to decide for themselves the distribution of their working hours, although in 34% of cases this flexibility resulted in them working longer hours (FPA Data Insight, 2020). In Czechia, 70% of those working from home had the freedom to determine their own working schedules (Kreidl et al, 2021). In Austria, 52% of employees and 47% of employers suggested that working hours had become more flexible with the introduction of teleworking during the pandemic (Bachmayer and Klotz, 2021). In France, 78% of respondents teleworking said that they could adapt their work schedules during the 2020 lockdown (Anact, 2021). Flexible working time is associated with telework arrangements and it is a resource for improving work–life balance.

Factors related to long hours and flexible working time while working remotely

At EU level, previous Eurofound research confirms the above findings, particularly in relation to working time autonomy and flexible schedules (Eurofound and ILO, 2017; Eurofound, 2020a). The EWCTS 2021 also confirms that those working remotely are more likely to have some degree of autonomy in work organisation (for example, autonomy in the order of tasks), which can be considered as a proxy of working time autonomy. However, research carried out prior to the pandemic (Eurofound, 2020a) shows that not all teleworking employees enjoy autonomy, and flexibility is not always employee friendly because it could translate into higher levels of connectivity and availability.¹⁵

Similarly, autonomy may be a double-edged sword because it could also result in employees working longer and unsocial hours (Eurofound and ILO, 2017; Eurofound, 2020a). Telework offers workers more autonomy, which is an asset. Autonomy, however, can also lead to an intensification of work when combined with heavy workloads and work cultures dominated by competition, self-management or mechanisms to enforce job performance. This is the ‘autonomy paradox’ of such arrangements and is particularly evident when the phenomenon of self-exploitation is considered (Chung, 2022). Therefore, this work organisation may lead to unsocial and irregular working hours, as shown at EU and national levels above.

Eurofound research linked working longer hours when teleworking (with the possibility of working anywhere and at any time with ICT) to high levels of job demands and frequent interruptions from incoming emails, calls and messages.

Moreover, teleworking employees working long hours are more likely to work in their free time (Eurofound and ILO, 2017; Eurofound, 2019, 2020a, 2021a). Consequently, they are also more likely to work overtime. The EWCTS 2021 confirms that this was the case during the pandemic.

Those engaging in partial telework (including hybrid work) in general reported the highest share of employees working in their free time (around 50% at least several times a month). Therefore, the risk of working during one’s free time is lower for those working full-time from home than for those working in a hybrid mode (Figure 17). However, working during free time does not always mean that an employee is working longer hours or overtime, especially in the case of those engaging in hybrid work. Data suggests that those working in a hybrid mode were more likely to reorganise their time use rather than prolonging their working time.

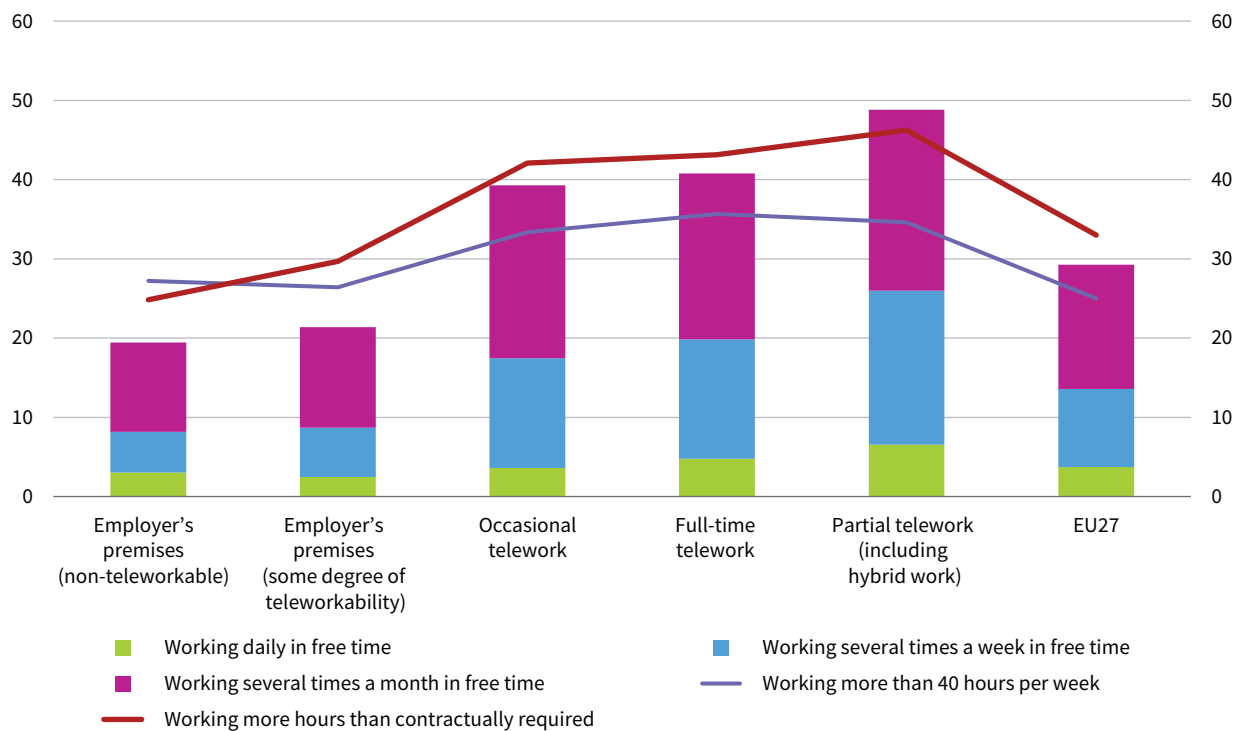
Regardless of telework arrangement, the groups most likely to work in their free time are managers and professionals. These occupations usually have more autonomy than mid- and low-skilled occupations. Therefore, both place of work and occupation influence the likelihood of employees working during their free time.

As a result of the mentioned factors (for example, working during free time), according to the EWCTS 2021, 46% of employees teleworking reported working more hours than contractually required, compared with 30% of those working from their employer’s premises full-time (with teleworkable jobs). Interestingly, teleworkers who partially work from home are slightly more likely to report working overtime than full-time and occasional teleworkers. However, within the partial telework group, those working only in a hybrid mode are less likely to report working overtime.

Research at national level has identified some other factors related to working long hours and overtime in telework settings. According to Spanish researchers, 30% of regular teleworkers increased their working time during the pandemic, and this was attributable to several factors, including flexible working hours, the absence of time-recording schemes and the introduction of results to be achieved, thus extending the working day until these expected results were obtained (Molina et al, 2020). A French study also suggests that multiplication of digital channels of communication between employer and employees and among colleagues can also increase working time (Clouet, 2021).

15 See definitions of employee-friendly flexibility and employer-friendly flexibility in Eurofound (2013).

Figure 17: Share of full-time employees working overtime, working during their free time and working more than 40 hours per week by telework arrangement (%)



Source: EWCTS 2021

Therefore, a myriad of factors contribute to employees working longer hours and overtime while teleworking. Research in Germany (Hofmann et al, 2021) and the analysis of Eurofound's *Living, working and COVID-19* e-survey suggest that remote working is not the only factor. The pandemic itself has been a factor driving the increase in employees working during their free time, mainly because of their need to carry out home-schooling and domestic tasks while teleworking, but possibly also because of the travel restrictions imposed during lockdowns and feelings of job insecurity in some sectors. This is also supported by Danish and French research which suggests that workers with children worked longer hours owing to their need to fulfil both work and caring responsibilities (Clouet, 2021; MESA, 2021). Belgian, Greek and Italian evidence shows that women are more likely than men to report working long or irregular hours (Glorieux et al, 2020; Vatavali et al, 2020; Azzolari et al, 2021). For instance, 65.7% of Italian women, but only 56.9% of men, felt that they worked more when working remotely (Azzolari et al, 2021).

This national-level evidence suggests that, to some extent, the pandemic-induced long and irregular hours

affected more women than men. However, EWCTS 2021 analysis shows that, among those working in their free time, women are less likely than men to report working overtime, which suggests that women are more likely than men to find it necessary to better organise their time rather than prolong their working time. This finding was also confirmed by the analysis of Eurofound's *Living, working and COVID-19* e-survey (Eurofound, 2021a). In spring 2021, approximately one-third of those who worked during their free time were not working overtime or working longer hours; they had simply reorganised their work schedule (Eurofound 2021a). Therefore, both gender and working in hybrid mode were factors that contributed to making it more likely for individuals to reorganise their time rather than prolong their working time.

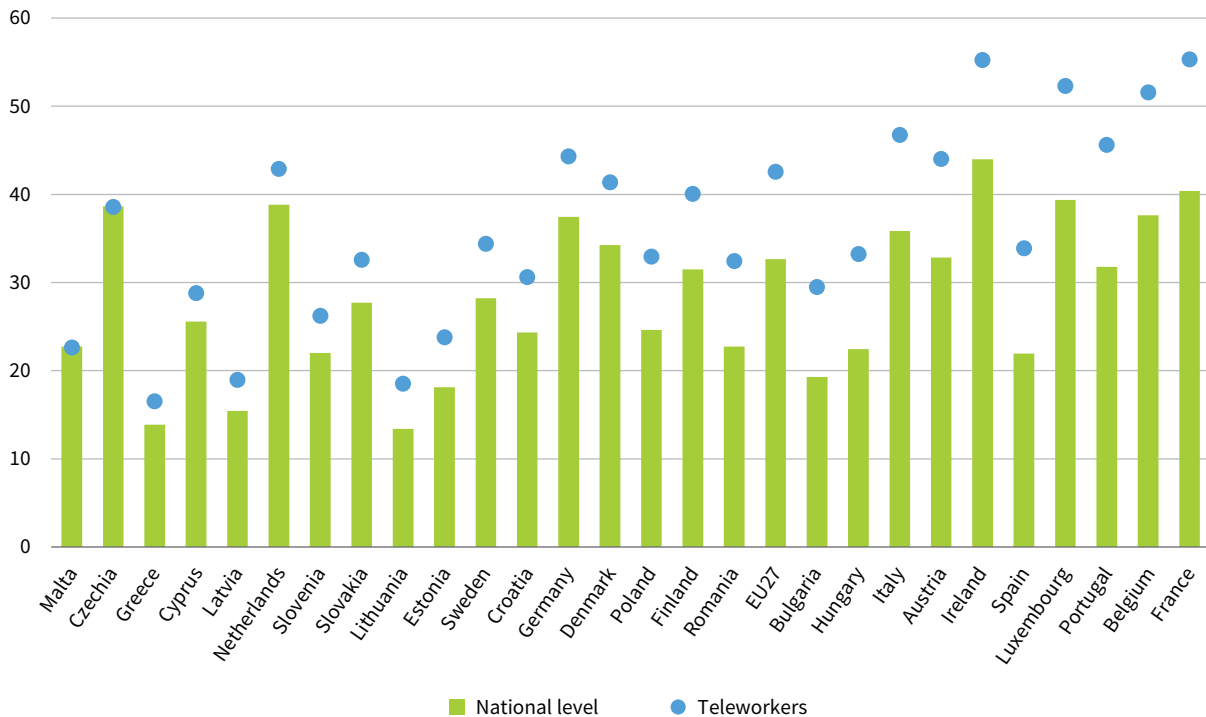
Country-level differences in working overtime

Figure 18, produced utilising the EWCTS¹⁶ dataset, shows the percentage of teleworkers¹⁷ working overtime in each EU Member State compared with the national average of all workers. The figure shows that rates of overtime vary greatly by country, with over 50%

¹⁶ EWCTS 2021 data were collected between March and November 2021 but fieldwork was finalised on different dates in each country. The majority of the countries had the fieldwork finalised by June, July or August 2021 but Austria, Belgium, Cyprus, Czechia, Germany, Portugal, Slovakia and Slovenia had interviews ongoing in October and November 2021. It is important to understand Figure 18 in the context of fieldwork that captured data at different points of the pandemic.

¹⁷ Includes those working occasionally (only sometimes) from home, in regular partial telework and working fully from home.

Figure 18: Share of employees in telework arrangements (full-time and partial telework) working overtime compared with the national average of all workers, 2021 (%)



Note: Countries are ordered based on the difference between overtime worked by teleworkers and overtime worked at national level.
Source: EWCTS 2021

of teleworkers reporting working overtime in Belgium, France, Ireland and Luxembourg, and less than 20% working overtime in Greece, Latvia and Lithuania. Of particular interest are countries with the greatest difference between rates of overtime in telework and the national average; from highest to lowest these are Spain, Bulgaria, Hungary, Portugal and Romania. All reported an increase of more than 40% in the share of workers reporting overtime in telework compared with the national average of all workers. Therefore, in these countries, telework contributes more than in other countries to employees working more hours than contractually required. Differences in percentage points between overtime at national level in telework are highest in France, Belgium, Portugal, Luxembourg, Spain, Ireland, Austria, Italy and Hungary (more than 10- percentage-point difference in telework arrangements). Therefore, overtime in telework is also of concern in these countries.

An interesting issue to be considered is whether this overtime is paid or unpaid. National-level studies and surveys have found a relatively high percentage of teleworkers working longer hours but not benefiting from overtime pay, although important differences can be seen among countries. In Finland, 19% of teleworkers claimed to have occasionally worked overtime without being paid in 2020 (Keyriläinen, 2021),

while the same was true for 14.7% of Latvians who worked remotely (Kruks et al, 2021). In Lithuania, around a third (32%) of survey respondents working remotely reported regularly working unpaid overtime, while 36% reported working unpaid overtime ‘sometimes’, and around 32% reported not working unpaid overtime (Naprys, 2021). In Greece, 52.3% of private-sector employees reported working longer hours than contracted when teleworking and without being paid for overtime, while only 5.4% worked more hours than contracted and were paid for it (Nikos Poulantzas Institute, 2021).

The findings presented above are related to one of the main concerns of workers and policymakers in relation to telework: the ‘always on’ culture defined by permanent connectivity and availability, with few opportunities to disconnect from work.

Need to be available and ability to disconnect

The previous section has shown that long and flexible working hours, combined with unpaid overtime, seem to have occurred when teleworking during the pandemic. Thus, it is important to investigate a key issue in the evolving discussion around telework practices: the extent to which workers are expected to

be available outside working hours and the implementation of the right to disconnect, meaning the right of individuals to not be reached by employers and third parties during non-working hours.¹⁸

Extensive evidence shows that during the pandemic many teleworking employees were not able to disconnect during non-working hours, which could be one of the causes of extended working time. At EU level, the EWCTS 2021 shows that those working remotely were more likely to work overtime and to report that they kept worrying about work when they were not working. Both conditions could be associated with ‘disconnection’ difficulties.

At national level, up to 44% of Austrian employees reported making themselves available for their employer at times when they would not usually work (IFES, 2020). In France (UGICT-CGT, 2020, 2021), a representative study performed during the lockdowns in 2020 and 2021 found that up to 78% of teleworkers did not benefit from a formal right to disconnect in 2020 (60% did not benefit in 2021), and only 18% had defined hours during which they could be reached (45% had these in 2021). Moreover, the same study suggests that two-thirds of respondents reported receiving professional communications outside working hours through various means (email, text messages, and so on), and 69% of respondents claimed to have worked at least occasionally outside their regular working hours. Similarly, up to 24% of Finnish employees said that they were contacted on a daily basis outside working time regarding matters related to work, whereas 23% were never contacted outside working time (Keyriläinen, 2021). In France, 64% of teleworkers feel that they are ‘overconnected’ (Anact, 2021).

In addition, 31.7% of Greek teleworkers said that they had been compelled by their employer to remain available outside working hours, even if not deemed necessary (Nikos Poulantzas Institute, 2021), and one in five Greek workers stated that they were often called on to work outside their normal working hours (Ta Nea, 2021). In Ireland, 14% of teleworking employees reported that their employer did not give them the right to disconnect outside working hours (McCarthy et al, 2021), and only 36% of respondents stated that they did not respond to emails outside working hours (McCarthy et al, 2020). Furthermore, up to 25% of German teleworkers stated that they took shorter or much shorter breaks when working from home (Pfnür et al, 2021), while 52% of French teleworkers said that they took fewer breaks during the day while teleworking and 46% said that those breaks were shorter. Some 65% of Slovenian teleworkers felt as if they had been available

outside working hours through email or other electronic media, while a similar percentage said that they wanted their employers to limit their access to work emails outside working hours (Černe and Aleksić, 2020). In Italy, up to 40% of teleworkers reported answering emails, phone calls and work messages on their lunch breaks during the pandemic (Azzolari et al, 2021).

Reasons underpinning difficulties in disconnecting

To a large extent, the difficulties that employees face when trying to disconnect stem from the lack of a right to disconnect agreement and the ‘disconnection’ culture at company level. For instance, in a survey of Austrian company representatives carried out by Deloitte (2020), up to 20% of respondents agreed that most employees should be available to address work issues during their free time, and an even greater proportion (55%) believed that managers should be available in their free time (Deloitte, 2020). In the same survey, almost half of company representatives (46%) stated that no rules regarding telework practices – including the use of work equipment, working time regulations or the method of recording working time – were introduced, or clarified, to cope with working from home during the COVID-19 pandemic (Deloitte, 2020). In Spain, a recent study found that only 36% of workers are employed by companies recognising the right to disconnect (through sectoral- or company-level agreements or internal agreements or protocols). This study found that the ability of teleworkers to disconnect may improve if a company-level agreement is implemented in this regard (Cotec Foundation for Innovation, 2021).

This research provides further evidence that teleworkers are prone to working outside their regular working hours and suggests that this increase in work is the product of existing attitudinal and cultural norms in the world of work. The normality or acceptability of extended working hours has become embedded in some work environments. Thus, in many workplaces there is not only an absence of a right to disconnect but also an ‘always on’ culture that means employees are expected to always be available to work. The recognition of this situation and its impact on employees’ health and work–life balance has led to the adoption of regulations related to the right to disconnect in nine Member States between 2017 and 2022, and debates have emerged in most of the remaining Member States (Eurofound, 2020d, 2021b, 2022c). Chapter 3 on the regulation of telework presents recent developments in relation to the right to disconnect.

18 Currently, the right to disconnect exists in only nine Member States, namely Belgium, France, Greece, Ireland, Italy, Luxembourg, Portugal, Slovakia and Spain. For an extensive discussion on existing legislation on the topic, please refer to Eurofound (2020d, 2021b, 2021c).

Even though difficulties in disconnecting already existed prior to the pandemic (Eurofound, 2019, 2020a), it is very likely that this difficulty has increased given more employees are now teleworking.

Conclusions

A finding confirmed during the pandemic is that employees working remotely experienced longer working hours, and therefore there was an increase in hours for those who shifted from employer's premises to remote working. Working from home, before and during the pandemic, has made it more likely that employees work more than 40 hours a week. Those teleworking full time were only to some extent more likely to report working long hours than those working remotely on an occasional basis. The telework arrangement with the lowest share of employees working long hours is hybrid work.

Working during free time and working overtime are to some extent correlated, and teleworking has increased the frequency at which both occur. According to the EWCTS 2021, two-thirds of those working partially from home (including those hybrid working) stated that they worked during their free time and worked overtime several times a week. Therefore, working during free time has been induced by both the pandemic and teleworking. Around two-thirds of employees teleworking worked long hours, beyond their contractual requirements and therefore in their own free time, while one-third reorganised their time. Women were more likely than men to better organise their time, probably because women are more likely than men to carry out unpaid work (caring responsibilities and housework). When not teleworking, employees may be less likely to work during their free time. However, it would be a mistake to conclude that employees have been working in their free time and longer hours only because of the pandemic; these conditions are inherent to teleworking, at least in the current world of work.

It is expected that, even after the pandemic has subsided, the trend of teleworkers working during their free time and working overtime will continue; however, this may occur to a lesser extent when pandemic-related factors, including school closures, that get in the way of work disappear. Another pattern we can expect with the extension of telework is an increase in flexible working time. Eurofound research has shown that there is a large positive correlation between ICT-based working (telework) and flexible working time, including working time autonomy, but also working during non-standard working hours, for example in the evenings and at weekends. This has also presented challenges related to working outside working hours and constant availability. The hybrid mode seems to provide, to some extent, better working time patterns, including flexibility and preventing long hours, compared with other telework arrangements.

It should be highlighted that a culture of working long hours has important consequences for teleworkers, including higher pressure and stress, feelings of burnout and difficulties in disconnecting. Moreover, the working time flexibility that telework provides has negative consequences in terms of workers' working patterns, their mental health and the impact of work on their personal lives (Vanadzija, 2021).

Monitoring telework during the pandemic

Monitoring of employees can include a combination of traditional methods, such as micromanagement and excessive supervision, including calls, messages and e-meetings, and new methods including specific monitoring software and surveillance tools. The extensive increase in the use of digital tools raises concerns regarding privacy, surveillance and monitoring of workers and their performance, including the need to respect the applicable rules on collection of personal data. This is even more challenging when working remotely with ICT.

During the pandemic, there has been increasing concern regarding the stricter monitoring of work through digital tools. Existing evidence at national level shows that in general the monitoring of work performed by employees teleworking did not particularly increase in the first months of the pandemic and was not widespread. However, there was an increase in certain types of monitoring, such as monitoring quality of outputs, and in some countries, a small increase in monitoring digital tools.

In Finland, a study carried out in the first months of the pandemic found that a large majority of respondents (72%) experienced no change in the monitoring of their work after the shift to telework. Only 4% said that they experienced an increase in monitoring. In Italy, in a survey among ICT workers, 55% declared that they had never been monitored, enjoying the full trust of management, and 33% felt that they were being monitored to the same degree as they were on site; only around 10% felt that they were being monitored more, either through IT tools (6%) or by management (6%) (Gaddi, 2021). It is worth highlighting, however, that experience of increased monitoring was more commonly reported by respondents whose education level was low (primary education, 11%) (Kovalainen et al, 2021). In Spain, in the context of a general absence of specific monitoring, younger workers were more regularly monitored by their superiors through calls and e-meetings (Molina et al, 2020).

Although monitoring was rare, it did exist; a shift to increased monitoring based on quality outputs was reported in some countries. In addition, there have been experiences of an increase in monitoring through video calls, emails, and so on, and it has been reported that

new monitoring software has been used, even though these tools are not yet in general use. However, findings suggest that employees fear being monitored through the use of software tools even if there is no clear evidence that such tools are in place. For many employees (almost half in some countries) the use of software monitoring tools is seen as an example of mistrust and could affect their motivation at work (Eurofound, 2022).

By way of contrast, other research available shows that companies have introduced a number of specific practices for the control and monitoring of teleworkers. In a Hungarian online survey on telework conducted in March–April 2020, 36% of respondents said that they had communicated with their bosses more frequently since the start of the pandemic, which they attributed to management reinforcing control, for example by clear task management and monitoring of work (Bakonyi and Kiss-Dobronyi, 2020). Another Spanish study shows that the main telework management and monitoring methods used during the pandemic were supervising objectives and results (46%); calls, messages and e-meetings with superiors (28%); and calls, messages and e-meetings with co-workers (16%). Only 12% stated that their organisations implemented specific performance-monitoring tools (Molina et al, 2020).

In Finland, research suggests that online monitoring (whereby the employer monitors the screen or the keyboard) was experienced by only 3% of teleworkers, whereas 24% of them reported that their employers monitored their working time, in particular checking what time employees logged in to their companies' IT systems (Kovalainen et al, 2021).

There is some limited evidence that software-based monitoring tools have been used to track employees. In the Netherlands, research among 1,200 home-based workers shows that around 13% were aware that they were being monitored with software by their employer (the actual number monitored might be even higher as not every worker was familiar with the software). In addition, 8% of respondents stated that their employer was frequently checking whether they were available or connected through email, chat or other methods of communication (CNV-onderzoek, 2021). Another study, carried out in the Netherlands by a software company, showed that 38% of the employees worked for a company that used employee-monitoring software to track employees, and that 22% of the companies introduced this software during the pandemic (GetApp, 2021). Finally, in a survey of 451 Spanish teleworkers, 64% of respondents claimed that their organisations had installed remote work management mechanisms and feared being supervised using technology in a remote environment through specific real-time productivity metrics or other monitoring software (Capgemini Research Institute, 2020).

The installation of monitoring software and other surveillance mechanisms is often perceived by employees as a breach of trust on the part of managers (Capgemini Research Institute, 2020). For instance, 51% of Dutch teleworkers suggest that the use of employee-monitoring systems harms the trust culture in the company, 39% think that it causes more stress among employees, 29% believe that it decreases employee morale and 25% consider that these practices cross ethical boundaries (GetApp, 2021). In the Netherlands, 33% of teleworkers find being monitored uncomfortable (Unisys, 2021), where some practices – that is, checking microphones, using facial recognition to verify a worker's presence, monitoring starting and finishing times, using video recordings and screenshots and location tracking – are particularly unpleasant for employees (GetApp, 2021; Unisys, 2021). In Finland, 17% of teleworkers perceive these monitoring practices as negative, whereas the largest percentage (64%) have a neutral opinion and only 11% consider them necessary (Kovalainen et al, 2021).

Conclusions

There is no clear-cut evidence of widespread increased monitoring of teleworkers or of the use of control practices during the pandemic, although such a trend has been reported in some countries. Teleworkers often perceive some monitoring tools as a violation of their privacy and believe that they are harmful, stressful and bad for morale. Even though the EWCTS 2021 does not include any variables related to monitoring and surveillance, it is possible that the theoretical higher level of autonomy of employees teleworking prevents an important increase in digital monitoring tools. However, when such monitoring tools are adopted, employees could report lower levels of well-being because of the potential increase in stress levels.

Hybrid work: Productivity, work relationships and preferences

Even though telework has existed since the 1970s, the massive shift to remote work during the pandemic has created some concerns among both employees and employers. The widespread shift to telework during the pandemic has generated questions about the impact on productivity and performance and on social relationships in a work environment. If telework is proved to have a negative effect on these aspects, it could represent a barrier to the expansion of telework. However, with the existing evidence, there is a clear preference for continuing this work arrangement in the future.

Due to the widespread adoption of hybrid forms of work, research has been conducted on the possible impact on the social environment, communication and teamwork in companies, along with the quality of life and work in general.

Effect on productivity

Overall, surveys among employees carried out in the various EU Member States show that working remotely has improved performance and productivity. Employees report better concentration in work, fewer disturbances and interruptions from co-workers and the office environment in general, better discipline during formal meetings, less small talk than in face-to-face meetings, better work environments, simpler organisation of work and leisure time, more flexible working hours, empowerment and trust to make work-related decisions and time savings due to a reduction in commuting (CCCP, 2020; FAOS, 2020; Swedbank, 2020; Capital Media, 2021; Grossmann et al, 2021; KPMG, 2021; MPSV, 2021; Pereira et al, unpublished). In addition, evidence from France shows that teleworkers were more productive between 2020 and 2021, even though individuals with little or no previous experience in telework were subject to a particularly complex and time-consuming learning transition involving the creation of new routines, rearrangement of spaces or mastering of new tools – such as virtual meetings and video call software (Anact, 2021).

It also appears that productivity while teleworking is improved by other variables: a higher level of education, a good physical environment at home, part-time or hybrid telework, the use of virtual collaboration tools, a goal-based organisation of work and a higher level of trust (Eurofound, 2022c).

Employers also report that telework had an overall positive effect on productivity and performance, as shown by surveys of employers carried out during the pandemic in Austria, Czechia, Italy, Malta, Portugal and Spain (Eurofound, 2022c).

However, there is also limited evidence showing a rather negative impact of telework on productivity, for example from surveys of employers or employees in Belgium and Denmark. Reasons cited for productivity loss include a lack of cooperation with colleagues, the fusion of work and private life (parenting, household tasks, and so on), increased difficulty in getting important documents or other working material, concentration problems and technical problems resulting from the use of digital devices or a lack of adequate training or work equipment (DAK, 2020; Swedbank, 2020; Grossmann et al, 2021; KPMG, 2021; Kruks et al, 2021; TNO, 2021a). Productivity was also reduced by lockdowns, combined with the closure of schools and care facilities, a lack of sufficient work experience and manager's low digital literacy (Eurofound, 2022c).

Working relationships while teleworking

There is mixed evidence about how the massive shift to remote working has affected the organisation of work and work relationships in general. Survey evidence suggests that the outcomes depend on the work context

and the type of activity and vary between countries. Moreover, the results are likely to depend on the time the information was collected, with more negative results in periods of strict lockdowns (full-time telework) than in periods when it was possible to work from the employer's premises, at least part of the time.

There have been some concerns on the impact of telework on interaction with co-workers, social isolation and a lack of social contact and communication with colleagues, as shown by the reviewed literature from Austria, Denmark, France, Greece, Hungary, Malta, Poland and Slovenia (Eurofound, 2022c).

Some respondents to the July 2020 round of the *Living, working and COVID-19* e-survey who were working from home and working long hours also reported some worrying impacts on their well-being, such as feeling isolated (Eurofound, 2020b). The data show that the probability of employees experiencing these feelings increased with the number of hours worked from home (Eurofound, 2021a).

In addition, working remotely from home seems to have had some negative impacts on **coordination and teamwork among co-workers**, which may have made it **difficult for them to get support from colleagues and co-workers** to solve work issues or clarify how to carry out work. Evidence of this has been reported in Austria, Czechia and France (Eurofound, 2022c). However, according to other national reports these difficulties were not widespread and the EWCTS 2021 showed that in general lack of support has not been an issue.

A more neutral or positive impact of telework on communication and teamwork among employees has also been widely reported. For instance, a survey carried out in Cyprus revealed that, although communication and collaboration between off-site and on-site colleagues was often described as difficult, the majority (74%) of participants working remotely reported that the quality of communication remained the same when teleworking during the pandemic, 17% reported that communication was better and 9% reported that it was worse during teleworking (FinExpertiza, 2020).

In Italy, in a survey carried out among employees of national research centres, few respondents mentioned 'the difficulty of carrying out complex operations with one or more work groups operating remotely' (18% of women and 23% of men) or 'the complexities of remote dialogue with colleagues and managers' (18% for both women and men) as negative aspects of remote working (Cellini et al, 2020). Similarly, in a survey of Italian ICT workers, only around 10% of respondents reported a deterioration in cooperation between colleagues or between workers and supervisors connected to remote working (Di Nunzio, 2021), although this percentage is probably higher in other sectors or jobs less familiar with ICT and virtual environments.

In addition, in Denmark, available research shows that, although coordination was difficult to some extent, teamwork did not suffer greatly during lockdowns, as the room for error and experimentation was expanded, which led to better teamwork and coordination (FAOS, 2021). In addition, concerning the support received from colleagues, a Finnish study did not find much difference between teleworkers and non-teleworkers: 74% of people working from their employer's premises said they got support from colleagues, compared with 78% of hybrid workers and 73% of full-time remote workers (Hakanen and Kaltiainen, 2020). Both results suggest that remote work does not make a big difference to the support that employees receive, at least in Scandinavian work cultures, where people are more accustomed to working remotely.

These findings are confirmed at EU level. In line with the EWCS 2015, the EWCTS 2021 found that the share of employees reporting problems related to support from colleagues is not higher among teleworkers than among those working only from their employer's premises. And the difference between those teleworking only occasionally and those teleworking full time is minimal. Therefore, it is very likely that during the pandemic, although difficulties may have arisen at specific times, telework did not lead to a difference in support between teleworkers and those working at their employer's premises.

The mixed evidence from employees' surveys at national level showed that quality of social relations, isolation, communication and support from colleagues seems to be dependent on the period of the pandemic, economic activity, telework frequency, country and the level of adaption to digital technology and remote work.

There is also mixed evidence on how employees assess **support from and communication with superiors and managers**. Some available literature shows that in general employees did not feel fully supported by their superiors and employers. For instance, a Greek survey showed that teleworkers believe that they are supported in telework primarily by colleagues and secondarily by managers and employers (Athens University of Economics and Business, 2021). A lack of mutual trust and communication problems between employees and their managers is also mentioned in other studies, together with problems related to disconnection and detachment from the organisation (PwC, 2020a; Raisiene et al, 2020; Rupčić, 2021) and problems in coordinating work with supervisors (LSTC, 2020; Pereira et al, unpublished). For instance, 24% of Irish teleworkers stated that communication from management was poor during the period of the pandemic when they were required to telework, and 47% said that it was harder to find out what tasks needed to be carried out (Forsa Trade Union, 2020).

Other studies, however, found more positive results on this subject. A study carried out in Malta revealed that 64% of remote workers felt supported by their organisations (in that they were provided with the information and tools necessary to carry out their work), although 22% felt that there was room for improvement (the rest were unsatisfied). An Irish study concluded that the surveyed employees were overall very positive about how their employer handled remote working from an organisational standpoint (McCarthy et al, 2021). A Dutch survey found that the social support that employees received from their superiors did not decrease during the pandemic, and 9 out of 10 teleworkers felt supported by their superiors (TNO, 2021b).

The EWCTS 2021 shows that those teleworking have not received less support from managers than those working at employers' premises and that within telework arrangements, working only occasionally (sometimes) from home has a higher association with getting support from managers.

Research has revealed that managers had a much more negative view than employees of how the pandemic affected working relationships. For example, an Austrian study found that 60% of employers with home-based workers assessed the impact of remote working on cooperation and teamwork as unfavourable, while only 11% assessed it as being favourable (Bachmayer and Klotz, 2021). In Italy, more than half of the interviewed companies recorded a deterioration in interpersonal relationships due to remote working (Istat, 2020). Research in Malta concludes that managers faced difficulties in both monitoring and motivating workers through online methods (Bezzina et al, 2021). In Belgium, 45.7% of organisations stated that the exchange of ideas and networking were more difficult when teleworking (Vandenbergh, 2021). In Sweden, interviewed supervisors stated that teleworking made it more difficult to discover if employees were experiencing personal problems or had an inappropriate workload (Swedish Agency for Work Environment Expertise, 2021).

Related to this, several pieces of literature show that the challenges for managers are more social than technical. A French study found that 74% of managers felt that the implementation of telework in their team was fairly easy, and 78% found it easy to identify the tasks that could be teleworked. However, 40% found it difficult to manage a team remotely, and 49% found it difficult to support their employees psychologically (Anact, 2021). Similarly, for Irish managers, the challenges were more linked to building personal connections, which was identified as a challenge for half of managers. In contrast, finding effective ways to complete the work as a team presented a challenge for only 32% of managers (McCarthy et al, 2021).

Employee preference for hybrid work

During the pandemic, the term ‘hybrid work’ was popularised because partial telework arrangements became widespread. However, partial telework arrangements have been around for some time and Eurofound research has shown that occasional forms of telework and hybrid work are associated with higher productivity and better work–life balance and health and well-being than full-time telework (Eurofound and ILO, 2017; Eurofound, 2019, 2022c). The Eurofound and International Labour Office report (Eurofound and ILO, 2017) recommends that formal part-time telework (hybrid work) be promoted to help teleworkers maintain ties with their co-workers and improve worker well-being, while restricting informal and supplemental work (work done beyond the normal working hours).

Hybrid work and occasional telework allow employees to benefit from both on-site and remote work. Hybrid workers have the opportunity to both interact face-to-face with colleagues and flexibly organise their work. As a result, they can limit their feelings of isolation while improving their work–life balance. Moreover, hybrid work could facilitate to some extent the management role of managers and employers. Considering the existing agreements (Eurofound, 2022a) and employees and companies’ preferences we can tell that the abovementioned analysis is correct.

Several studies and surveys at national level show that hybrid models of work or partial telework (combining telework and office work) are particularly appreciated by both employees and employers although, as seen above, for some of them this is associated with longer hours.

Almost half of surveyed Bulgarian and Greek workers prefer the hybrid employment model, as it is perceived to allow high levels of flexibility both for the company and for the employees, and it improves employee satisfaction (Capital Media, 2021; Randstad Greece, 2021). In Germany, up to 73% of workers are in favour of working half of the time from home and half of the time from the office, and nearly one-third of respondents prefer spending 75% or more of their working time at home (Pfnür et al, 2021). Similarly, another German study (Kunze et al, 2020) found that most employees favour this model, working two or three days at home and the rest of the week at their employer’s premises. In Latvia, 43% of workers prefer a hybrid model of work, while 33% of respondents prefer working only in the office and 19% prefer working only from home (Swedbank, 2020). In the Netherlands, most teleworkers (between 60% and 70%) are in favour of hybrid working (KIM, 2020).

At EU level, the various waves of the Eurofound *Living, working and COVID-19* e-survey have confirmed employees’ preferences for hybrid work followed by full-time telework, with their least favourite option being working full-time from their employer’s premises. Teleworking is also generally viewed positively by employers: according to the online European Company Survey 2020, only 1 in 10 managers had a negative view of the teleworking experience, while positive opinions and ‘neither positive nor negative’ opinions were balanced (Eurofound, 2021b). The following research showed some of the reasons for this preference.

In Belgium, teleworking employees with a regular hybrid working arrangement supported by electronic communication have a lower risk of burnout than colleagues who do not have the option of hybrid working (IDEWE, 2021).

A global online survey conducted across 25 countries worldwide between May and June 2021 by the Adecco Group, a recruitment firm, found that both workers and employers agree on the benefits of hybrid working, with 8 in 10 saying that both employees and businesses benefit from employees having increased flexibility to decide how much time they spend at the office and remote working (Adecco Group, 2021). Moreover, the majority believe that hybrid working patterns offer opportunities to create a more diverse and inclusive workforce, benefiting particularly those with disabilities (75%) or working parents (73%). Linked to the previous point, hybrid forms of work are primarily perceived by employees as a tool to increase flexibility. As regards groups of workers, young adults and women are particularly in favour of these hybrid forms of work (KPMG, 2021; Profesia, 2021).

Conclusions

Shifting to hybrid work has had a positive impact on performance and productivity, or at least it has not had a general negative effect. The main risks of telework arrangements for the organisation of work and work relations are isolation and lack of communication, while social support from colleagues seems to be a less relevant problem. National- and EU-level survey results suggest that, in general, support from colleagues has not been negatively affected for those teleworking. However, employers and managers seem to have a more negative view in respect of their managing capacity, their ability to support staff, and their facilitation of teamwork and communication. The issue of the socialisation of new staff is a concern, but there is no evidence that telework has had an impact on this issue.

Based on the national-level literature presented above, findings suggest that those risks were more acute at the beginning of the pandemic during strict lockdowns when companies and employees were obliged to work remotely fulltime. The adaptation to remote work and implementation of more hybrid forms of telework seem to have led to an easing of some of these problems. Some aspects seem to influence the outcomes: employees' previous telework experience, employees' familiarity with digital tools, telework arrangement, economic activity and the country where an employee is working. In the long term, there could be a reduction in these risks with the further development of technologies for working virtually, and changes in work organisation, for example, including tasks which are more objective focused, and by considering different ways of interaction through, for example, hybrid work.

This future-orientated assessment is confirmed by experiences from the pandemic and employees' strong support for hybrid work. Evidence from literature at national level shows that benefits could include a reduction in the risks of isolation and burnout and enhanced flexibility. Many company-level social partner agreements on hybrid work have been introduced, highlighting that companies also see this arrangement as one that could benefit both employees and employers (Eurofound, 2022a). At the core of the interest in hybrid work is employees' perception of the need for a better work–life balance. Hybrid work supports this balance by allowing employees to have greater autonomy in relation to their place of work and to organise their working time so that it fits better with their private and family life and well-being needs. However, policymakers should be aware of the possible risks of telework and hybrid work, in particular in relation to challenges associated with the organisation of working time and the potential impact on work–life balance and health and well-being.

Potential of telework to improve work–life balance: Lessons from COVID-19

The imposed lockdowns and the implementation of telework during the pandemic had an important impact on the balance between work and personal life. Evidence shows that telework improved some aspects of employees' work–life balance during the pandemic.

As demonstrated above ('Organising working time, connecting and disconnecting during the pandemic'), in the context of lockdowns and resulting struggles in daily life, telework also had negative impacts, such as increasing employees' working hours, reducing their ability to disconnect from work and the blurring of the line between their professional and personal lives.

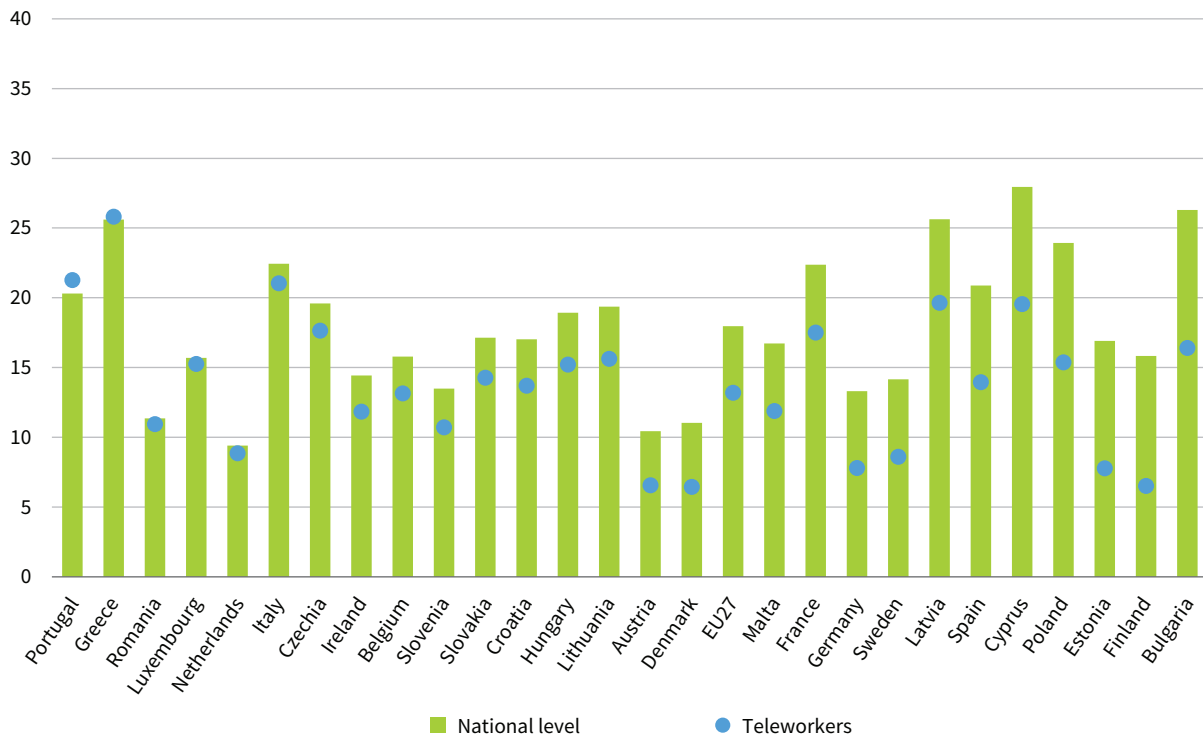
Although EU countries implemented different COVID-19 policies at different points of the pandemic, multiple national studies present similar results on the experience of telework and work–life balance during the pandemic. In a representative online survey of employees in Austria, 43% of respondents reported being better able to reconcile work and private life, while 23% reported that it was more difficult to do so (ÖGB, 2020). Another study, conducted in Denmark by the National Union of Commercial and Clerical Employees, concluded that most employees found that working from home helped them obtain a better work–life balance (HK, 2021). In Germany, most of those working from home (77%) reported an improved work–life balance, although 60% also stated that the division between work and private life became more blurred (Hans-Böckler-Stiftung, 2020). Other studies in Portugal, Slovenia and Sweden have found similar results (Černe and Aleksić, 2020; Ingelsrud and Bernstrøm, 2021; OSP, 2021; Swedish Confederation of Professional Employees, 2021).

Country-level differences

To capture perceived work–life balance, respondents to the EWCTS 2021 were asked if their working hours fit in with their family or social commitments and were provided a four-level scale, with the options 'very well', 'well', 'not very well' and 'not at all well'. In the EU Member States, those teleworking were less likely to report poor work–life balance (13%) compared to those working only from the employers' premises (18%). In Finland and Bulgaria particularly, telework seems to be a strong contributor to reducing the share of employees reporting poor work–life balance, whereas in Portugal, Greece, Romania, Luxembourg and the Netherlands, differences in reporting poor work–life balance between those teleworking and the national average of all workers were small (Figure 19).¹⁹

¹⁹ EWCTS 2021 data were collected between March and November 2021 but fieldwork was finalised on different dates in each of the EU27 countries. The majority of the countries had the fieldwork finalised by June, July or August 2021, but Albania, Germany, Austria, Belgium, Cyprus, Czechia, Portugal, Slovakia and Slovenia had interviews ongoing in October and November 2021. It is important to understand Figure 19 in the context of fieldwork that captured data at different points of the pandemic.

Figure 19: Share of teleworking employees with a poor work–life balance compared with the national average of all workers, EU27 (%)



Note: Poor work–life balance includes employees responding ‘not very well’ and ‘not at all well’ to the question about ‘how working hours fit in with their family or social commitments outside work’.

Source: EWCTS 2021

Impact of teleworking on work–life balance

A number of studies have found that the ability of telework to improve work–life balance has a clear gender divide. A Greek survey, conducted in November 2020, found that women were less positive about their telework experience than men (Nikos Poulantzas Institute, 2021), and similar results were obtained in a Czech study (Kreidl et al, 2021). In addition, Portuguese and Spanish research show that women report worse teleworking conditions and more difficulties in balancing work and personal life than men, primarily due to additional workload as a result of unpaid caring responsibilities (e Silva et al, 2020; Borràs and Moreno, 2021).

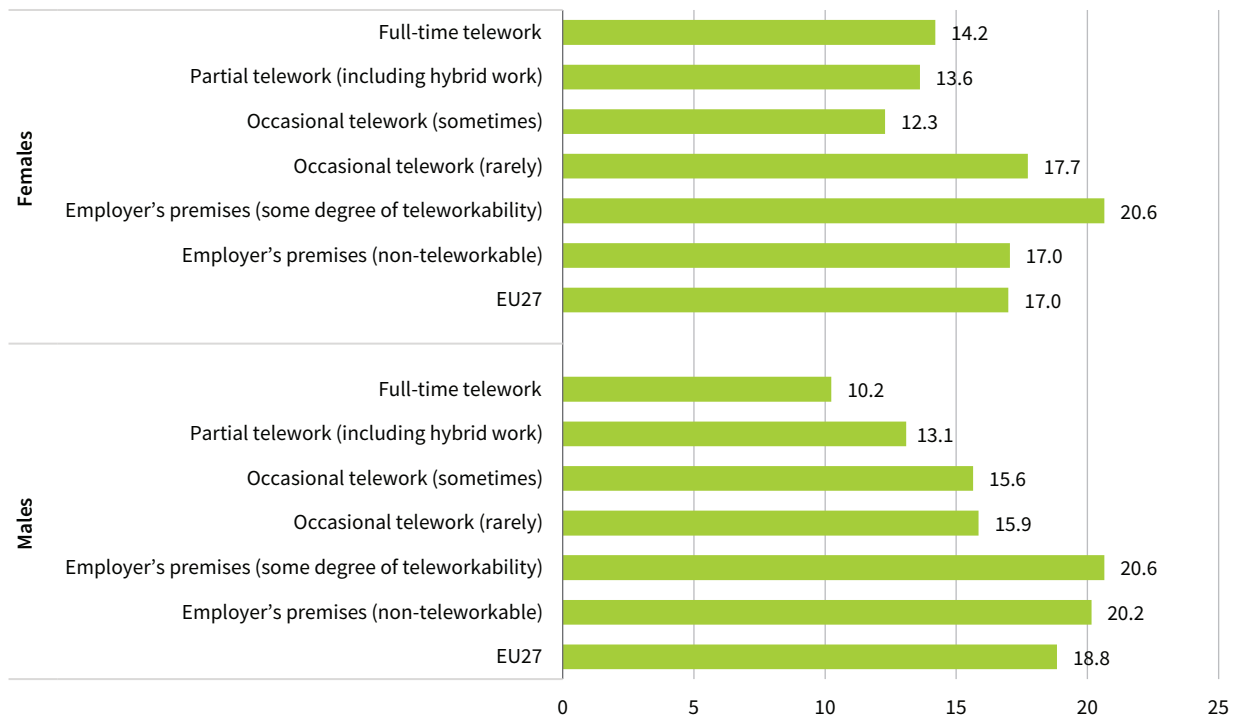
Those gender differences observed at national level have also been identified at EU level. Despite a general positive impact of telework on work–life balance for both women and men compared to working only at their employer’s premises, the picture is different when

comparing the experiences of men and women who telework (Figure 20). While men have a positive association between work–life balance and telework frequency, women are best able to balance work and life when they telework occasionally (sometimes).²⁰ Gender differences between full-time teleworkers are relevant; 14% of women reported poor work–life balance, compared with only 10% of men. Similar differences are observed with hybrid work (working from home and office only).

Employees working from the employer’s premises have the hardest time balancing their work and personal lives, but within this group those in jobs that have some degree of teleworkability fare worse (about 21% report a poor work–life balance). One possible reason is that they work with ICT and therefore also have more opportunities than those in non-teleworkable jobs to work beyond the working hours expected at their employer’s premises (Eurofound, 2019) and at the same time they lack the benefits of working remotely.

²⁰ Results were confirmed with a logistic regression run separately for the male and female samples with a dichotomous work–life, balance-dependent variable and controlling for telework, country, sector, occupation, household characteristics and level of education.

Figure 20: Share of employees with a poor work–life balance by gender and telework arrangement, EU27 (%)



Note: Poor work–life balance includes employees responding ‘not very well’ or ‘not at all well’ to the question about ‘how working hours fit in with their family or social commitments outside work’.

Source: EWCTS 2021

The EWCTS 2021 also captured specific issues related to the balance between work and private life. For instance, respondents were asked if they felt too tired after work to do some of the jobs that needed to be done in their household, if they kept worrying about work when not working and if they found it difficult to concentrate on their job because of their family responsibilities. Telework seems to reduce post-work tiredness, demonstrating again the positive impact of telework on work–life balance aspects. However, this positive impact is perceived more by men than by women.

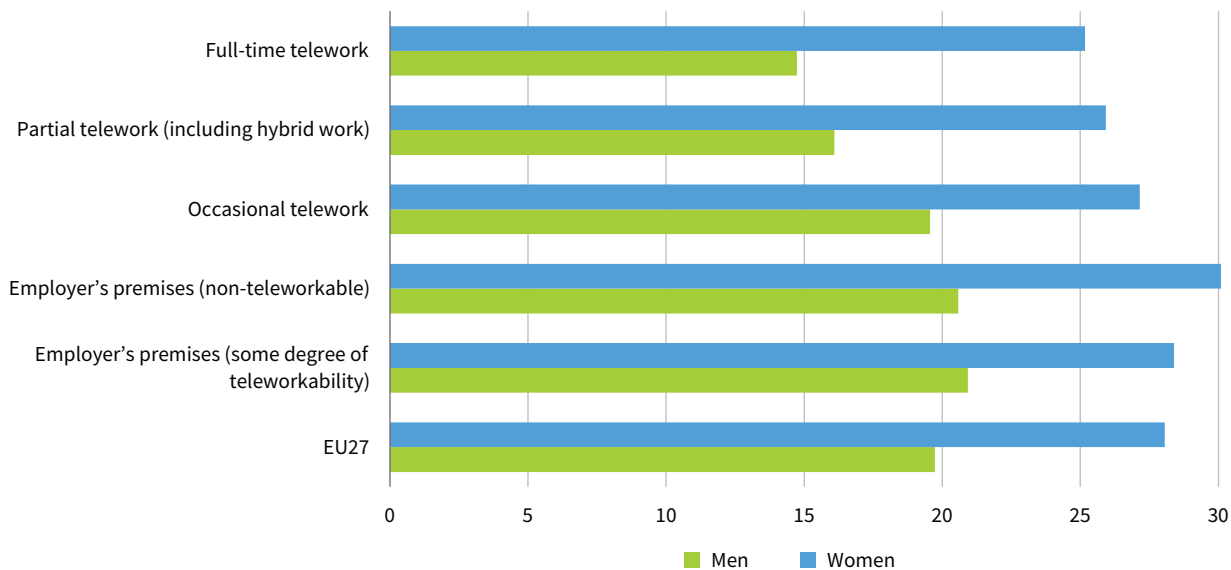
At EU level, there is a clear gender divide: half of men reported that they did not feel too tired to deal with household jobs after work, while only 38% of women reported the same. This is possibly due to the higher share of women dealing with care responsibilities while working from home. Social distancing measures resulted in an increase in housework and caring (when schools were closed in some countries), tasks that are predominantly carried out by women. At national level, for example, a French study found that 26% of men and 47% of women reported that the time

they spent on domestic labour increased by more than four hours per day during the pandemic (UGICT-CGT, 2020).

Owing to this gender divide, men benefited more from telework than women in terms of having the energy and time to deal with household responsibilities. Some 21% of non-teleworking men reported being too tired after work to take care of household jobs, compared to around 15% of those in full-time telework (Figure 21). The differences for women are not as pronounced; 30% of non-teleworkers in a non-teleworkable job reported feeling too tired, while 25% of full-time teleworkers reported the same.

Regardless of the viewpoint that telework can, in general, better facilitate balancing work and personal life, it can also have negative consequences; for example, employees may struggle to disconnect from work or their unpaid and paid duties may overlap. For instance, 90% of Dutch experts consulted suggested that employees were not able to mentally distance themselves from work during the pandemic (TNO, 2021a), a difficulty that is also mentioned in Latvian and Maltese studies (Bezzina et al, 2021; Vanadziņš, 2021).

Figure 21: Share of employees feeling too tired after work to do some of the household jobs that need to be done by telework arrangement, EU27 (%)



Source: EWCTS 2021

Indeed, EWCTS 2021 data show that teleworkers experienced more difficulties disconnecting from work during the pandemic:²¹ 30% of individuals who teleworked to some extent reported that they worried about work when not working (often or always), while only 21% of non-teleworkers reported this. The groups that fared the worst are partial (including hybrid) teleworkers (33%) and occasional teleworkers (30%), who had even more difficulties disconnecting psychologically than full-time teleworkers (26%). Across all teleworking arrangements, women (33%) had more difficulties disconnecting from work than men (28%).

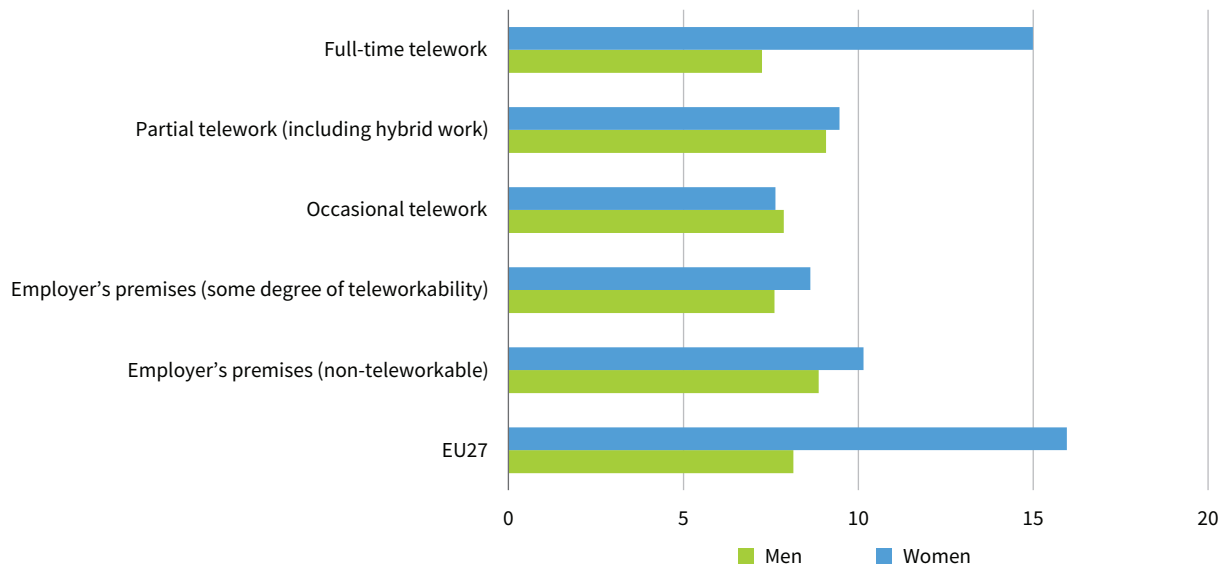
The finding that there are disconnection difficulties among teleworkers is partially related to the fact that working outside the employer's premises is sometimes considered supplemental work (Eurofound and ILO, 2017) that cannot be carried out during working hours and must be carried out during non-working hours. Moreover, teleworking means that employees could potentially continue working even outside working hours. The employee is left with only two options: work in their free time or worry about work when they are not working.

Another negative aspect of telework is that it can blur the line between paid and unpaid duties, something that became especially evident during the pandemic, when family responsibilities increased. According to the EWCTS 2021, during the pandemic full-time home-based workers found it more difficult than partial teleworkers to concentrate on their work because of their family responsibilities. This is particularly the case for women.

As Figure 22 shows, 15% of women engaged in full-time home-based telework found it difficult to concentrate on their job, compared with nearly 10% of women engaged in partial telework. This is in line with some studies carried out at national level. A study conducted in Romania found that 78% of those who reported interrupting their work to deal with household and family duties were women (Wisemetry and Impact Hub Bucharest, 2020). Furthermore, a French study conducted in 2020 found that women working from home faced greater expectations to prioritise domestic responsibilities over their roles as paid workers (Recchi et al, 2020).

21 The questions asking respondents if they were 'worrying about work', finding it 'hard to concentrate' or 'feeling too tired', all refer to the 12 months prior to the interview.

Figure 22: Share of employees finding it difficult to concentrate on their job because of family responsibilities, EU27 (%)



Source: EWCTS 2021

Teleworking and care responsibilities

Although telework and flexibility play an important role in achieving a good work–life balance, difficulties in reconciling work with family and private life are connected with unpaid work, including caring for children and relatives, as well as doing housework.

In the literature, evidence shows that some of the negative consequences of telework are particularly felt by individuals with children and care responsibilities. For instance, in a survey of Hungarian teleworkers with children, respondents reported that their biggest challenge was maintaining a good work–life balance, and that this was a far greater challenge than issues such as adapting to new routines or lack of personal contact (Life Training, 2021). A French study found that reconciling professional and family life was particularly difficult for parents of children under 15 years old, and even more so for single-parent families (Flamand et al, 2020). Two other studies conducted in Latvia and Poland also found that workers with children felt a deterioration of their work–life balance which was strongly related to the need to take care of children (Vanadžiņš 2021, Swedbank, 2020). A Polish study from a gender perspective reports that 82% of Polish women who are mothers of minors indicated that the presence of children at home complicated remote work, a figure which far exceeds the share of men experiencing similar problems (Dolot, 2020).

According to the EWCTS 2021, on average, unpaid work constituted more than one-third of the total working time for employed people in 2021, with the largest share of unpaid work being spent on caring activities, mostly caring for children. While, on average, men spend more time in paid work per week (approximately 43 hours)

than women (approximately 37 hours), women spend much more time (31 hours) than men (18 hours) in unpaid work. In total, women spent 68 hours per week in paid and unpaid work compared to 61 hours for men, a difference of 7 hours per week. The analysis also showed that many more women than men take care of children and do housework daily.

Therefore, the rate of experiencing difficulties in concentrating on the job because of family responsibilities is higher among parents in general. However, due to the unbalanced gender distribution of paid and unpaid work, there is a much higher share of women reporting difficulties in concentrating on the job because of family responsibilities in all work arrangements, and it is only slightly higher in telework arrangements than those working at their employers' premises.

Despite the potential blurring of boundaries between work and caring whilst teleworking during the COVID-19 pandemic, in line with the results on work–life balance in the previous section, Table 4 shows that the incidence of poor work–life balance is lower among parents who telework (than among non-teleworking parents). However, there are gender differences. The positive effect of telework on work–life balance has been felt more by fathers when they fully work from home, while mothers are better able to cope with work and care commitments when they telework occasionally (sometimes).

Parents who do not telework report the worst fit between work and family commitments. Poor work–life balance is especially high for parents not teleworking or teleworking only on rare occasions. However, the group who fares the worst are working mothers who work at their employers' premises in jobs which are teleworkable to some extent: 25% report poor work–life balance.

Table 4: Share of employees with a poor work–life balance, by telework arrangement, gender and whether or not they have children, EU27 (%)

Telework arrangement	Men		Women	
	No children	Children	No children	Children
Full-time telework	10	11	14	15
Partial telework (including hybrid work)	12	15	13	15
Occasional telework (sometimes)	14	19	12	13
Occasional telework (rarely)	14	20	16	22
Employer's premises (some degree of teleworkability)	20	22	18	25
Employer's premises (non-teleworkable)	20	21	17	17
EU27	18	20	16	19

Source: EWCTS 2021

Conclusions

Although telework improves work–life balance overall, and particularly for parents, it can also have negative consequences for employees; for example, they may find it difficult to disconnect from work (particularly if they are hybrid working) or the line between paid and unpaid work may become blurred (particularly for those in full-time telework). While both men and women are better able to reconcile their work and private life when teleworking, men are better off when doing full-time telework, while women benefit more from teleworking sometimes. This is related to the additional unpaid work that women had to take on during the pandemic, which not only added to their total workload but made it difficult for them to concentrate on work when working from home.

Health and well-being while teleworking

Some of the conditions presented above, including working long hours during free time, working overtime and irregular working hours, along with aspects such as isolation, difficulties in disconnecting, and the blurring of boundaries between work and private life, all have an impact on the health and well-being of employees who telework. According to Eurofound research, telework and ICT-based mobile work can affect worker's health both in terms of physical issues, including upper limb pain, headaches and eyestrain and psychosocial symptoms, including stress, fatigue, anxiety and poor well-being (Eurofound, 2020a).

Physical issues

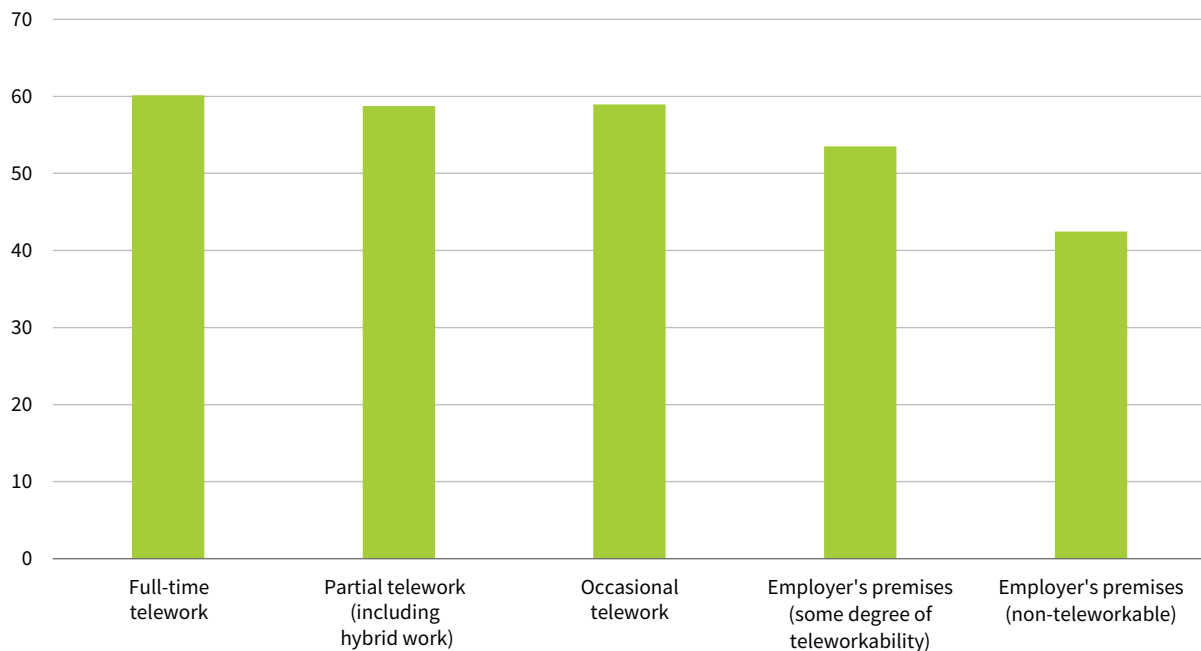
In general, employees teleworking report less exposure to physical risks and therefore their overall physical health is better than those working in non-teleworkable jobs. However, there are still some aspects of concern.

A striking difference is observed when examining health-related issues, such as headaches and eyestrain. The EWCTS 2021 shows that workers in telework arrangements report a higher likelihood of suffering from headaches or eyestrain: around 60% report headaches (Figure 23). The category with the lowest share of workers reporting headaches and eyestrain is in a non-teleworker job (42%). According to the Swedish Agency for Work Environment Expertise (2021), these problems are caused by prolonged screen time and bad lighting conditions (Eurofound, 2022c).

The issue of muscular pain in the shoulders, the neck and/or the upper limbs has been reported in national-level surveys in Belgium, Malta and Sweden, and by EU-OSHA (2021b) where the cause has been primarily identified as poor ergonomic conditions. Because the transition to home working was so sudden at the beginning of the pandemic, many people were ill-equipped to telework and lacked, for example, height-adjustable chairs and desks. The analysis carried out based on the *Living, working and COVID-19* e-survey showed that 1 out of 10 employees working fully from home reported that they had inadequate equipment in July 2020 (Eurofound, 2021a).

Psychosocial symptoms

During the pandemic, several studies found that stress, anxiety and burnout were experienced by a large share of workers. This section shows findings dealing with work pressure as a cause for reporting psychological symptoms, burnout, anxiety and general psychological well-being.

Figure 23: Share of employees reporting headaches and eyestrain by telework arrangement, EU27 (%)

Source: EWCTS 2021

Work pressure as a psychosocial risk while teleworking

In Belgium, 64% of employees reported feeling more work pressure than before the pandemic. In Luxembourg, nearly half of women teleworking and one-third of men teleworking felt that they were under constant pressure; some also reported feeling unhappy or depressed during the lockdown, 41.6% of women and 36.6% of men (Dijst, 2021). In France, more than two-thirds of teleworking managers were affected by 'increased workload and hyperconnectivity in response to emergencies' (Flamand et al, 2020).

Work pressure as measured in the EWCTS 2021, 'working to tight deadlines often and always', is experienced by more than half of teleworkers (54% of teleworkers in all categories) compared to 48% of workers based at their employer's premises with some degree of teleworkability, and by 27% of non-teleworkers. Work pressure or work intensity can increase the risk of psychosocial related health problems such as stress or sleeping problems, or have a general negative impact on health (Eurofound, 2013). As regards sleeping problems, in Ireland, 40% of respondents to a survey had trouble sleeping due to work-related worries in 2020 (Mental Health First Aid Ireland, 2020).

Burnout

Another important aspect of work-related health is the risk of burnout, which the World Health Organization defines as 'a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy' (WHO, 2019).

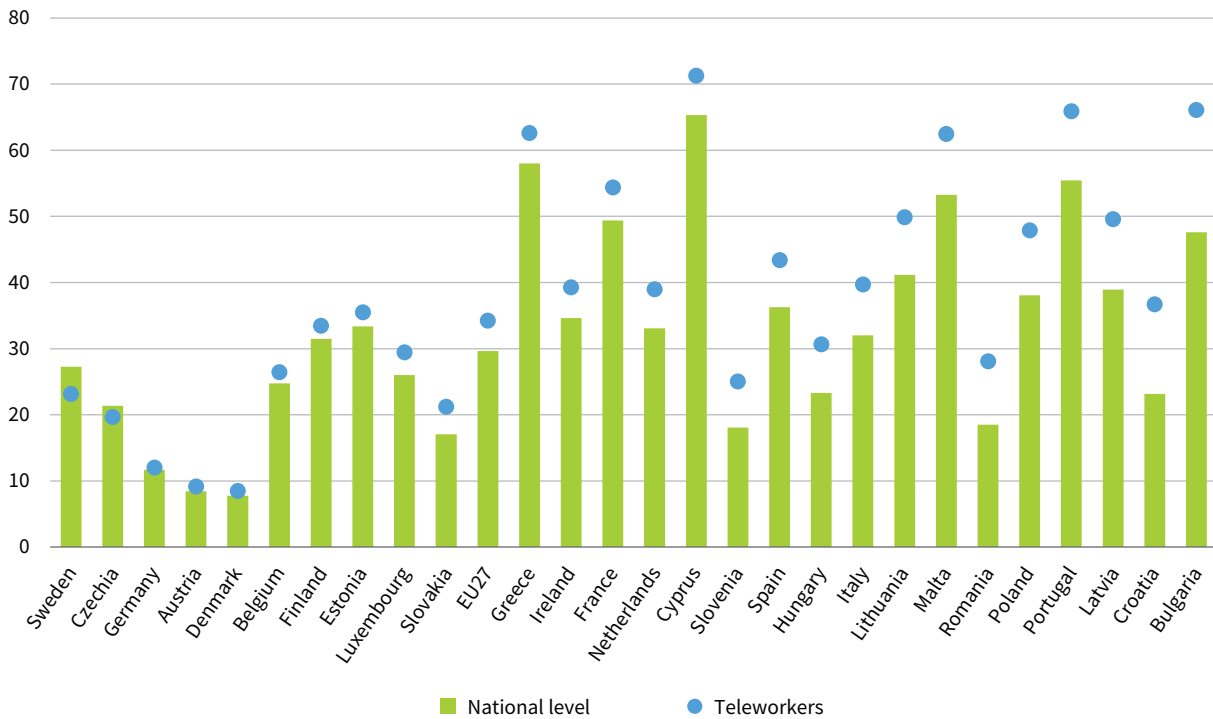
More than half (54%) of Greek employees suffered from burnout in the 12 months preceding an Adecco Group survey in 2021.²² In education, a Polish study among teachers of primary and secondary schools in the city of Radom found a correlation between remote teaching and growing symptoms of professional burnout, including feeling overwhelmed by tasks, work-related stress and fatigue (Mazur-Mitrowska, 2021).

Country-level differences in levels of anxiety

Findings at national level showed that 31% of French teleworkers experienced anxiety (Erb and Reynaud, 2021). With a different methodology, the EWCTS 2021 shows that the share of teleworkers reporting anxiety in the 12 months prior to the survey is above the national average in all countries except for Sweden, Austria, Czechia and Germany.

²² The survey was conducted between May 2021 and June 2021, among 14,800 respondents across 25 countries, including Belgium, Denmark, Finland, Greece, the Netherlands, Slovenia. All respondents were between the ages of 18 and 60, must have had a desk-based job of more than 20 hours per week and had their work altered during the pandemic (for example, by having to shift to a more remote work environment).

Figure 24: Share of teleworkers experiencing anxiety, compared with teleworkers and the national average of all workers, 2020–2021 (%)



Source: EWCTS 2021

Figure 24 shows that the differences in the share of workers experiencing anxiety between the national average of all workers and teleworkers is highest in some central-eastern European countries (Bulgaria, Croatia and Latvia) and southern European countries (Portugal and Malta). Therefore, in these countries it is very likely that telework plays a more important role in employees experiencing anxiety. Interestingly, low levels of anxiety are reported in some countries with high shares of teleworkers, such as Sweden, Denmark, Belgium and Finland. Various reasons might be behind this finding, including a working force more used to teleworking.

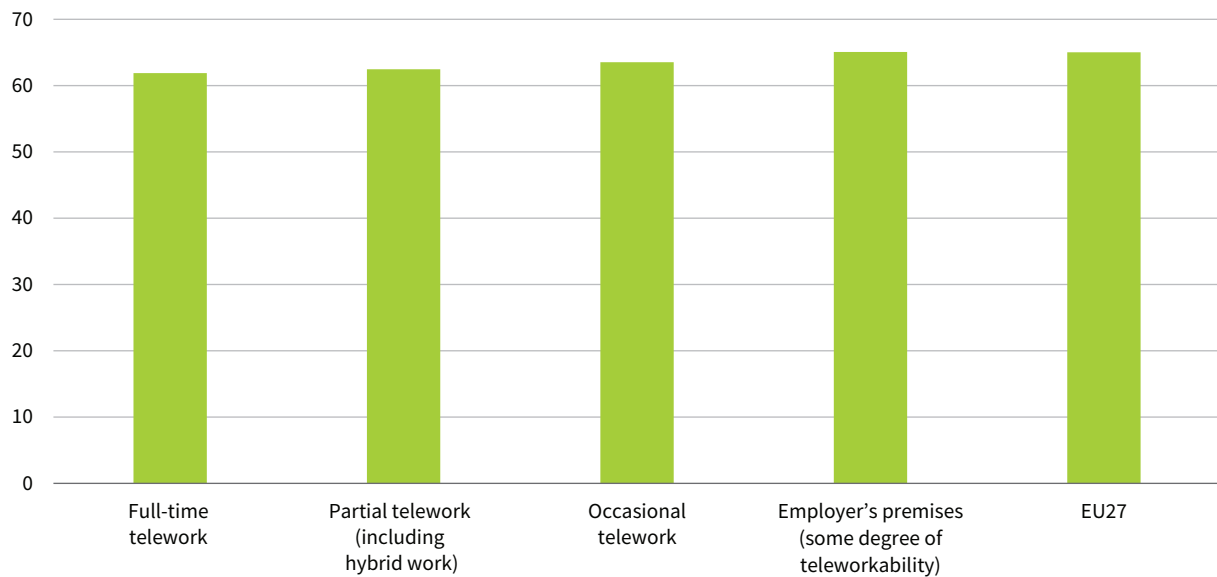
At EU level, full-time teleworkers report higher levels (36%) of anxiety compared to partial (hybrid) teleworkers (33%) and workers in occasional telework (31%). A lower share of non-teleworkers (27%) and of those in teleworkable jobs but working at the employer’s premises (29%) experienced anxiety. These figures suggest that teleworking has played a role in increasing anxiety before and during the pandemic.

General well-being in different work arrangements

According to the EWCTS 2021, non-teleworkers registered the highest well-being score, at 65 out of 100.²³ The lowest scores were registered by teleworkers; full-time home-based teleworkers and partial teleworkers scored 62, and occasional teleworkers scored 64, which was one point below the EU27 average of 65 (Figure 25). The literature on well-being at national level provides mixed evidence, and findings are highly influenced by the period in which the respondents were surveyed (whether or not they were in a lockdown, their private life situation, and so on) and by the jobs of the workers (Eurofound, 2022c). When looking at well-being by country, full-time home-based teleworkers register the lowest well-being score in all countries except Finland and Hungary.

The well-being results may have also been affected by feelings of isolation, particularly for those teleworking more frequently (Eurofound, 2021a). The negative effect on subjective well-being and self-reported health for

23 The well-being index goes from 0 to 100, with 100 being the best, below 50 at risk of depression and below or equal to 28 classified as clinical depression.

Figure 25: Employees' well-being score (out of 100) by telework arrangement, 2021, EU27

Note: The well-being index goes from 0 to 100, with 100 being the best, below 50 at risk of depression and below or equal to 28 classified as clinical depression.

Source: EWCTS 2021

teleworkers and ICT-based mobile workers was also previously reported by Eurofound (2020a). A multivariate analysis of EWCTS 2021 data confirms that poor work–life balance, fear of losing one’s job and having young children are all factors that worsen well-being, while feeling supported by one’s managers, often improves it.

Conclusions

During the COVID-19 pandemic, teleworkers suffered higher levels of anxiety than non-teleworkers, with full-time home-based teleworkers faring the worst. The increased rate at which teleworkers reported headaches and eyestrain is likely to be linked to

prolonged screen time and bad lighting conditions, but psychosocial factors could also play a role. These problems are reported both by full-time teleworkers and hybrid workers. Furthermore, during the pandemic, teleworkers registered the lowest well-being scores, which can be explained, to some degree, by the particular conditions experienced during the pandemic, including work pressure. A number of national-level surveys found that those teleworking are likely to report musculoskeletal disorders (MSDs). The findings suggest that most of the health and well-being problems presented in this section were a result of both a combination of pandemic-related restrictions and conditions of teleworking in general.

3 | Telework regulation in the EU

Chapter 1 shows that the prevalence of telework in the EU was rather modest before the pandemic with only a slow growth trend. Remote work was mostly concentrated in a small percentage of highly skilled professionals and managers as an occasional or partial (hybrid) telework pattern (Eurofound and ILO, 2017; Sostero et al, 2020). This situation changed drastically during the COVID-19 pandemic, as telework became the norm for all jobs in which it was technically feasible (teleworkable jobs).

It is very likely that a considerable proportion of employees will continue to telework following the pandemic because of the increasing number of teleworkable jobs (Chapter 1), the removal of cultural barriers, employees' preferences for teleworking and the evidence that productivity levels are not negatively affected (Chapter 2). Regarding working conditions, while telework has several advantages, research has also identified some important drawbacks which have to be considered. Overall, telework has potential benefits for companies in terms of productivity and expanding possibilities for different ways of organising work, and for employees in terms of flexibility, autonomy and work-life balance. In Chapter 2, research on telework during the pandemic confirmed some challenges existed, for example in relation to the organisation and duration of working time, isolation, and other impacts on the work-life balance and well-being of employees. New regulatory frameworks are being introduced in some EU countries due to the expansion of telework, the flexibility involved, including in relation to the place and time where work can be carried out, and its impacts on employment and working conditions.

Before the pandemic, regulations on telework were in place in some European countries (Eurofound, 2020c) and, in addition, the European social partners had adopted an EU Framework Agreement on Telework in 2002. During the pandemic, a social partners' framework agreement on digitalisation was signed, and the European Parliament passed a resolution on the right to disconnect, and fair telework, calling on the European Commission to bring forward an EU-level directive on the issue. This resolution calls for an EU legislative proposal and recognises the autonomy and central role of social partners in the negotiation. In response to this report, EU-level social partners are negotiating a directive on telework and the right to disconnect.

According to their work programme 2022–2024, there will be a review and update of the 2002 Framework Agreement on Telework to be put forward for adoption in the form of a legally binding agreement implemented through a directive (European Social Dialogue Work Programme 2022–2024).

This chapter analyses the various telework regulations in the 27 EU Member States and Norway. It identifies changes in regulations – both legislation and collective agreements – that have taken place during the pandemic. Among others, the following aspects are considered: the telework regime, which includes access to telework and information to be provided to the teleworker by the employer; the organisation of working time and the right to disconnect; occupational safety and health (OSH); and the coverage of expenses for employees while teleworking. All of these aspects are relevant to the protection of employees teleworking and the improvement of their working conditions. The chapter is mainly based on the report *Telework in the EU: Regulatory frameworks and recent updates* (Eurofound, 2022a), which can be consulted for more in-depth information on telework regulation in the EU.

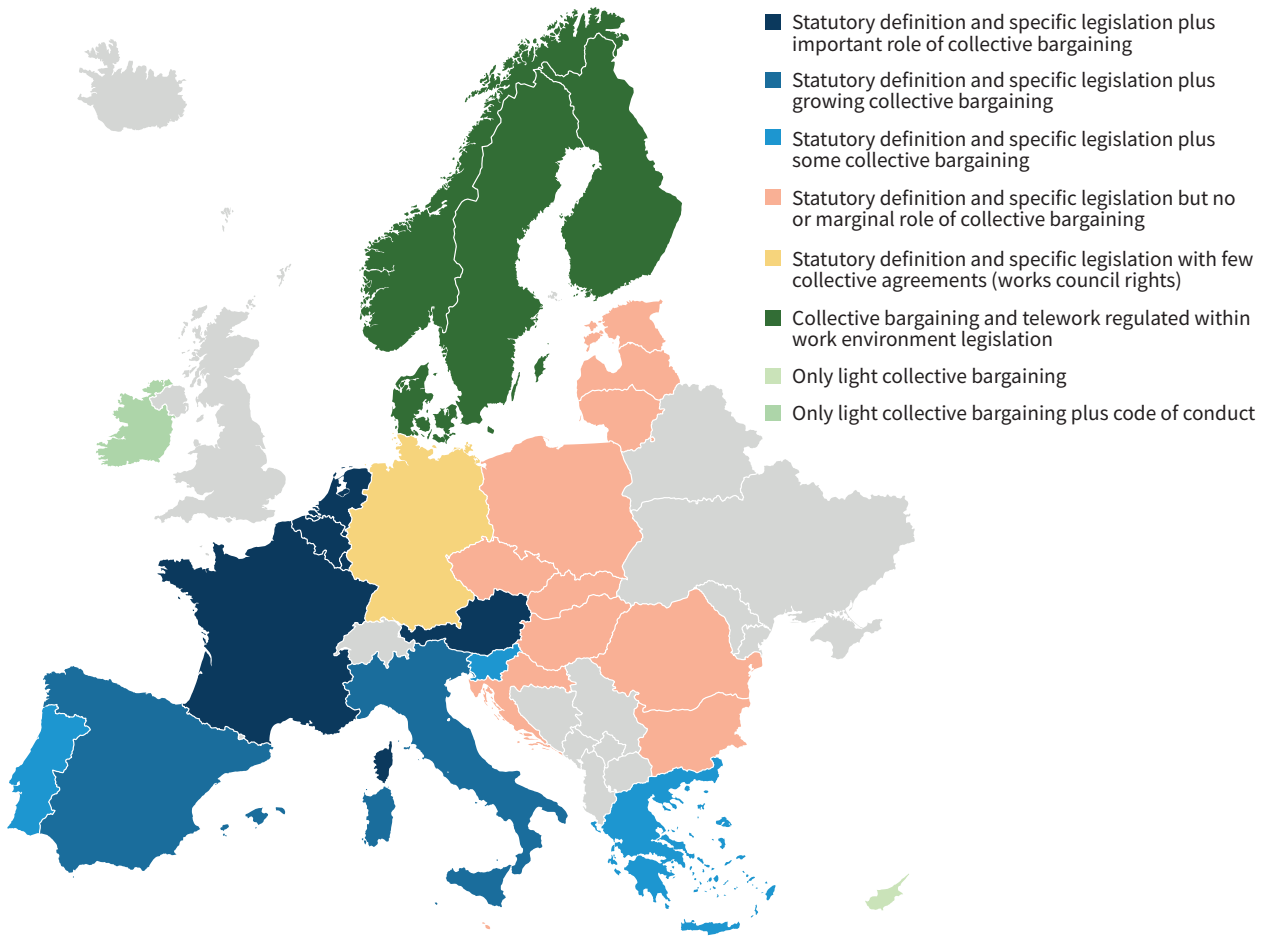
Regulatory frameworks in the EU

Most Member States had regulated telework before the pandemic and some have introduced changes or passed new regulations since the beginning of the pandemic. In this section, the focus is on identifying the differences in regulation between countries, and classifying countries in relation to the way they regulate telework. This analysis sheds light on how much consideration is given to workers' views and the extent to which workers are protected in each country.

In EU countries, telework can be regulated through statutory legislation or by social dialogue and collective bargaining (Visser and Ramos Martin, 2008; Eurofound, 2010, 2020c). In terms of telework regulation, Member States can be categorised into two main groups, with some variations mostly related to the role of collective bargaining (Figure 26).

The first group is made up of countries with **statutory definitions and specific legislation on telework** (Austria, Belgium, Bulgaria, Croatia, Czechia, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland,

Figure 26: Regulatory sources of telework in the EU countries



Source: Authors' own elaboration based on national contributions elaborated by the Network of Eurofound Correspondents (2021)

Portugal, Romania, Slovakia, Slovenia and Spain). In most of these countries, statutory legislation is complemented by cross-sectoral, sectoral and/or company-level collective agreements, although to various degrees. In Croatia, Latvia and Poland, statutory legislation is the only source of regulation (developed through individual agreements between employers and employees). Within this group as a whole, clusters based on the role of collective bargaining are shown in Figure 26.

The second group of countries are those either **without statutory definitions and specific legislation** addressing telework or where telework arrangements are dealt with in various laws related to data protection, safety and health, or working time and general labour (Cyprus, Denmark, Finland, Ireland, Norway and Sweden). In the Nordic countries, telework is mainly regulated through sectoral collective bargaining

(Finland and Norway) or through sectoral and company-level collective agreements (Denmark and Sweden). In Cyprus and Ireland, only company-level collective agreements have been identified. In the case of Ireland, there is also a code of good practices that deals with the right to disconnect and provides guidance on remote work.

The comparison of telework regulations across European countries shows relevant cross-country differences, which partly reflect the diversity of industrial relations models defined in the literature (Visser, 2009; Eurofound, 2018; Sanz de Miguel et al, 2020). When comparing the relationship between regulations based on statutory legislation and regulations based on social dialogue and collective bargaining, six country clusters can be identified (Table 5).

Table 5: Telework regulation clusters

Cluster	Countries
1. Corporatist-framed governance	Belgium, France and Luxembourg
2. Multi-employer-framed governance	Austria and the Netherlands
3. Southern European cluster	Italy and Spain (3a) and Greece, Portugal and Slovenia (3b)
4. Voluntary associational governance	Denmark, Finland, Norway and Sweden
5. Market-oriented governance	Cyprus and Ireland
6. State-centred governance	Bulgaria, Czechia and Lithuania (6a) and Croatia, Estonia, Hungary, Latvia, Malta, Slovakia, Poland and Romania (6b)

Note: Germany is difficult to classify, as highlighted in studies that have developed industrial relations model typologies (Eurofound, 2018), and therefore omitted from the table.

Source: Authors, based on national contributions by the Network of Eurofound Correspondents and additional desk research

Based on this classification, as well as the content of the regulations in each Member State and other aspects related to the national institutional settings and political context, it can be concluded that there are differences in relation to the role of legislation and the role of social partners in each cluster. These differences also have an impact on the coverage of provisions and the protection of workers.

For example, in **cluster 1** (corporatist-framed governance), the strong role of social partners is likely to have a positive impact on the inclusion of telework provisions which aim at a high level of protection for employees. Conversely, in **cluster 6** (state-centred governance), where social partners play a weak role, it is expected that telework regulations might not include such a high level of protection for employees. Notably, in countries with a small number of collective agreements and without national-level legislation, there will be groups of employees not protected because there is no regulation in relation to telework, for example in **cluster 5** (market-oriented governance).

Finally, a strong role of collective bargaining at sectoral and/or local level might have a positive effect on the adaptation of telework regulations to specific activities and companies. Therefore, in **clusters 1, 2, 3a and 4**, institutional characteristics mean they are better prepared for tailoring telework regulations to the reality of sectors and companies. In **cluster 6**, where collective bargaining is rather weak, developing telework regulations may be more difficult at company and sectoral level, and therefore less effective.

Changes in telework regulation during the pandemic

As a result of the pandemic, governments adopted a variety of temporary measures to foster telework in order to contain the spread of the COVID-19 (Eurofound, 2020c). However, this section focuses on more permanent national-level regulatory changes, including legislative initiatives and national-level collective bargaining, which were developed during the pandemic and should remain in force following the pandemic. This approach facilitates a future orientated understanding of the regulations and their potential impact on working conditions for teleworkers. Therefore, this section shows permanent national-level regulatory changes that have occurred during the pandemic. Changes related to both legislative initiatives and national-level collective bargaining are presented.

New legislative initiatives

Since the beginning of the COVID-19 pandemic, legislative initiatives on telework have been passed in Austria, Greece, Latvia, Portugal, Romania, Slovakia and Spain (Table 6). In all of these countries, the main driver of the reforms has been the unprecedented increase in telework and the expectation that the pandemic will accelerate pre-existing trends towards the digitalisation of work and increasing flexibility in work arrangements. In this context, legislative reforms have amended and updated previous legislation with the aim of introducing specific provisions targeting teleworkers in different legal texts (for example, in Austria) or providing a more complete and balanced regulation for employers and employees regarding certain key topics (for example, in Spain). Social partners have played an uneven role in the legislative changes; while they have been involved either through bipartite or tripartite agreement or in consultation processes in some countries (Austria, Portugal, Slovakia and Spain), in others, legislative changes were unilaterally designed (Greece, Latvia and Romania).

Table 6: Changes in national regulations of telework

Country	Legislative provision	Date of entry into force	Legislative approach	Social partners' involvement
Austria	Federal Act amending the Employment Contract Law Amendment Act, the Labour Constitution Act, the Employee Liability Act, the Labour Inspectorate Act 1993, the General Social Insurance Act, the Civil Servants' Health and Accident Insurance Act, and the Income Tax Act	1 April 2021	Amendment/update to previous legislation	Bipartite and tripartite consultation
Greece	Law No. 4808-19-06-2021	19 June 2021	Amendment/update to previous legislation	No
Latvia	Amendments to Section 76 of the Labour Law	27 May 2021	Amendment/update to previous legislation	No
Portugal	Law No. 83/2021 of 6 December 2021	1 January 2022	Amendment/update to previous legislation	Consultation
Romania	Governmental Emergency Ordinance Nos. 192/2020 and 36/2021	6 May 2021	Amendment/update to previous legislation	No
Slovakia	Act No. 76/2021 Coll. amending and updating Act No. 311/2001 on the Labour Code	1 March 2021	Amendment/update to previous legislation	Consultation
Spain	Royal Decree-Law 28/2020 of 22 September on remote work	22 September 2020	Separate piece of legislation, which integrates and harmonises previous legislation on the right to disconnect and flexible working time	Tripartite agreement

Source: Authors, based on national contributions by the Network of Eurofound Correspondents and additional desk research

In **Austria**, the so-called Home Office Law came into effect on 1 April 2021, following the widespread use of home offices during the COVID-19 pandemic. The law is not a stand-alone law, but rather a package of several measures that amended several pieces of legislation (for example, the Employment Contract Law and the Employee Liability Act). The law involved consultation with the social partners, who were asked by the government to start to negotiate a home office package in September 2020, when it became apparent that businesses and workers would continue to rely on telework after the pandemic.

In **Spain**, the government passed a new regulation through the Royal Decree-Law 28/2020 of 22 September 2020 on remote work. The legislation was introduced due to the increase in telework during the pandemic and the expectation that the proportion of workers teleworking would remain higher than before the pandemic. The aim of this legislation is to provide a sufficient and integrated regulatory framework that balances the use of telework and its benefits with a clear framework of rights. The legislation was the result of a tripartite agreement with the social partners.

In **Greece**, a new regulation on telework was included in a comprehensive labour market reform passed through Law No. 4808-19-06-2021. The new law provides for a complete regulation on telework. The law was unilaterally passed by the government, against trade unions' opposition, who were particularly critical of issues not strictly related to the telework regulation,

such as strike rights and the flexibilisation of working time.

In **Latvia**, an amendment to Section 76 of the Labour Law was adopted on 27 May 2021. A new article was adopted (No. 4), which states that if the employer and the employee have agreed on the performance of remote work, the employer must cover the employees' expenses related to the performance of remote working, unless otherwise provided for by the employment contract or the collective agreement.

In **Portugal**, Law No. 83/2021, of 6 December 2021, modified several aspects of the telework regulation in response to the increase in the use of telework. The new law was adopted following parliamentary debates on different legislation submitted to the Labour and Social Security Commission, and was also influenced by the *Green paper on the future of work* (Moreira, T. et al, 2021). It was subject to consultation with the social partners at the Standing Committee for Social Concertation, and aims to adapt telework regulation to the expected future expansion of telework.

In **Romania**, Telework Law No. 81/2018 was amended through Governmental Emergency Ordinance Nos. 192/2020 and 36/2021 following the rapid increase in telework arrangements. While the emergency ordinances dealt with several temporary measures, the new rules on telework are expected to remain in force after the end of the pandemic. The changes were motivated by the rapid increase in the number of telework arrangements.

Table 7: Main topics addressed in telework legislative reforms

Topic	Austria	Greece	Latvia	Portugal	Romania	Slovakia	Spain
Telework regime	X	X		X	X	X	X
Definitions	X	X		X	X	X	X
Organisation of work and working time		X		X	X	X	X
Right to disconnect		X		X		X	X
Compensation for the costs of telework	X		X	X	X	X	X
Equal treatment				X			X
OSH	X			X			X
Data protection and privacy				X		X	X
Collective rights				X			X
Training access						X	X

Source: Authors, based on national contributions by the Network of Eurofound Correspondents and additional desk research

In **Slovakia**, the amendment to the Labour Code of March 2021 brought several changes concerning homework and teleworking. The changes were introduced as many employees had to stay at home and others were asked to work from their home, if possible, during the pandemic. The main drivers of the adoption of new rules for telework and homework were the needs for more flexible working conditions, better reconciliation of work and personal life (including the right to disconnect), better implementation of new digital technologies and better adaptation to telework after the pandemic. The new legislation took into consideration most of the social partners' demands.

Main topics introduced in the legislation during the pandemic

The comprehensiveness of telework legislative reforms varies across the seven countries (Table 7). For this report, 10 key regulatory dimensions were considered, namely the telework statutory definition; the telework regime; the organisation of work and working time; the right to disconnect; compensation for the costs of telework; employment conditions; OSH; data protection, privacy and surveillance; collective rights; and training access.

The most comprehensive reforms, dealing with the greatest number of telework topics, have been passed in Spain (ten dimensions), Portugal (nine dimensions) and Slovakia (seven dimensions). The narrowest reforms in terms of topics covered are those from Austria (four dimensions), Greece (four dimensions) and Romania (three dimensions). In Latvia, only one dimension on costs compensation was addressed.

In the seven countries that have passed new legislation on telework (Austria, Greece, Latvia, Portugal, Romania, Slovakia and Spain), the legislative changes introduced have encompassed, in particular, the following topics.

- **The telework regime** (access to telework and information to be provided to the teleworker): This topic has been addressed in all six countries which have passed new legislation on telework (Austria, Spain, Greece, Portugal, Romania and Slovakia).
- **A new statutory definition of telework:** A new statutory definition has been introduced in six countries which have passed new legislation on telework (Austria, Spain, Greece, Portugal, Romania and Slovakia). Interestingly, new definitions differ in relation to some criteria, such as the regularity of telework. In Spain, regularity was specifically defined in terms of the proportion of working time, while, in Romania, the condition of regularity has been kept in the new definition but there is no longer the requirement for a certain number of days to be worked remotely. In Portugal, the requirement of regularity (*habitualidade*) was removed from the statutory definition, while in Slovakia, this requirement was added.
- **The organisation of working time:** This aspect has been modified in five countries, namely Greece (measuring and monitoring working time), Portugal (telework access for work-life balance purposes, the management of workloads and the monitoring of working time), Romania (the monitoring of working time), Slovakia (working time patterns) and Spain (the right to flexible working time for teleworkers and new rules on recording, measuring and monitoring working time).
- **The right to disconnect:** This right has been introduced in Greece, Portugal and Slovakia, and has been further regulated in Spain.

- **Compensation:** Provisions on compensation for equipment and office supplies have been dealt with in Austria, while provisions on expenses and coverage of costs are covered in Latvia, Portugal, Romania, Slovakia and Spain.

Other topics that are less commonly included in regulation are as follows.

- **Equal treatment:** Some changes have been introduced in Portugal (a guarantee of equal treatment) and Spain (a guarantee of equal treatment and of employment status).
- **OSH:** New provisions have been introduced in Austria (liability in the case of accidents), Portugal (risk assessments and the prevention of psychosocial risks, including isolation) and Spain (risk assessments and the prevention of ergonomic and psychosocial risks, including isolation).
- **Data protection, privacy and surveillance:** This topic has been covered in the legislative reforms of Portugal (the right to privacy and data protection), Slovakia (data protection) and Spain (the right to privacy and data protection).
- **Collective rights:** These have been addressed in legislative reforms in Portugal and Spain.
- **Training and career development:** This has been covered in Slovakia (training on ICT) and Spain (generic access to training and training on ICT).

Annex 2 presents these recent changes and an overview of the content of telework regulations in the EU Member States.

Legislation under discussion

There are four countries in which new legislation on telework is being discussed at the time of writing this report (Q2 2022): Germany, Ireland, Luxembourg and the Netherlands.

In **Germany**, in late 2020, the Ministry of Labour and Social Affairs proposed a Mobile Work Act that included the right to telework 24 working days a year (with a five-day week). This draft act did not reach consensus between the Social Democrats (SPD), the Christian Democratic Union and Christian Social Union in Bavaria (CDU/CSU), within the former grand coalition government, owing to the strong opposition of the CDU/CSU. A second draft that provided the ‘right to request’ did not reach consensus either. This draft law established that employees could ask to work remotely but the draft did not contain a legal entitlement for employees in this regard. Under the draft law, the employer was entitled to reject the request for any factual reason but needed to explain the refusal. It is worth noting that the purpose of this draft law was to

regulate mobile working arrangements in a comprehensive way, overcoming the divide between telework as defined by statutory legislation and mobile work, which is not regulated directly by legislation but by agreements between the works councils (equipped with strengthened co-determination rights on mobile work; see Box 1) and/or collective agreements. The German Trade Union Confederation (DGB) rejected the draft law and particularly opposed the introduction of a legal claim to home office solutions. The Confederation of German Trade Unions (DGB), on the other hand, welcomed such a step. Meanwhile, a new German government has taken office, so as of Q4 2022 further developments remain to be seen.

In **Ireland**, the government has published the Scheme of the Right to Request Remote Working Bill 2022. The bill sets a legal framework for employees and employers to negotiate remote working conditions, setting up a ‘right to request’ telework for employees. The proposed legislation will require employers to consider any requests by employees to work from home. It will put in place an appeals procedure for workers should the request be rejected. Any employee who has worked for more than six months will be able to submit a request to which employers will have up to 12 weeks to respond. The bill sets out 13 potential grounds for refusal of a request, including possible negative impacts on performance or concerns over internet connectivity at the suggested home working location.

In **Luxembourg**, the Minister of Labour filed a draft of Law No. 7890 with the Luxembourg Parliament on 28 September 2021. The legislation introduced the obligation for each company to define precisely the rules governing the right to disconnect into the Luxembourg Labour Code. The proposal is influenced by previous case law recognising the right to disconnect (a decision of the Court of Appeal on 2 May 2019). It was also based on a recent opinion issued by the Economic and Social Council that recommended putting in place mechanisms to encourage compliance with the right to disconnect and its implementation within companies (BSP, 2021).

In the **Netherlands**, on 5 July 2022 the House of Representatives approved a legislative initiative recognising working from home as a legal right for certain jobs. The goal of this new legislation is to enable a better work–life balance for employees, for example by reducing travel time. It amends the 2016 Flexible Work Act allowing employees to avail of flexible working hours as well as workplace location. At the time of writing (Q2, 2022), the legislative text is still being discussed in the Dutch parliament (Planet Labour, 2022).

Table 8: Overview of national-level (cross-industry) collective agreements on telework

Country	First generation			Second generation		
	Agreement	Date of origin	Binding force	Agreement	Date of origin	Binding force
France	<i>Accord national interprofessionnel</i>	2005	X	<i>Accord national interprofessionnel</i>	2020	X
Belgium	Collective Labour Agreement No. 85	2005	X			
Luxembourg				Grand-Ducal regulation	2021	X
Spain	<i>Acuerdo para la Negociación Colectiva</i>	2003				
Italy	<i>Accordo interconfederale</i>	2004				
Greece	National general collective agreement (EGSSE)	2006				
Estonia				<i>Kaugtöö kokkulepe</i> (joint agreement on telework)	2017	

Note: ‘First generation’ refers to collective agreements established following the 2002 EU Framework Agreement on Telework. ‘Second generation’ refers to collective agreements established from 2017 onwards.

Source: Authors, based on national contributions by the Network of Eurofound Correspondents

Changes in national-level collective agreements

National-level collective agreements on telework exist in only 7 out of the 27 European countries examined: Belgium, Estonia, France, Greece, Italy, Luxembourg and Spain (Table 8). The most powerful and far-reaching collective agreements on telework adopted at national level can be found in Belgium, France and Luxembourg – countries in which telework is regulated by a combination of statutory legislation and nationally binding collective agreements or where the latter have been turned into legislation by decree. In France and Luxembourg, agreements on telework with binding force have been newly negotiated or updated in light of the COVID-19 pandemic and the expansion of telework.

In **France**, as an increasing number of company-level agreements on telework were signed in early 2020 due to the COVID-19 crisis, all of the social partners at national level published a joint diagnostic report on the state of telework in September 2020. Following the diagnostic report, a new cross-industry agreement ‘for the successful implementation of telework’ was adopted in November 2020 (*Accord national interprofessionnel du 26 novembre 2020 pour une mise en oeuvre réussie du télétravail*). The agreement clarifies and completes the existing regulations on telework set by the 2005 national interprofessional agreement (ANI) as well as the 2017 Labour Code amendments. It aims at enabling the social partners at branch and company levels to successfully negotiate the implementation of telework and thereby emphasises the role of social dialogue. The agreement was extended to all employees by governmental order in April 2021 and is now legally binding for the economic sectors and companies

represented by the signatory parties. It therefore covers the vast majority of employees and employers of the private sector in France, with the exception of only a few professional branches, for example the agricultural and entertainment sectors.

All branch- or company-level agreements on the concrete implementation of telework must adopt the provisional framework set by the 2020 agreement, supplemented by the 2005 ANI and the Labour Code. Correspondingly, the agreement has a strong binding force for almost the whole economy. However, two articles of the Labour Code (L2252-1 and L2253-3) slightly limit its power by enabling the derogation from 2005 ANI provisions if a company-, establishment- or group-level agreement on telework already exists, even if such an agreement is less favourable from the employees’ point of view.

In **Luxembourg**, the EU Framework Agreement on Telework led to a national agreement on telework in 2006 (*Convention nationale relative au télétravail de 2006*), which was updated by the social partners in October 2020 during the pandemic (*Nouvelle convention interprofessionnelle sur le régime juridique du télétravail*). This new interprofessional agreement sharpens the definition and scope of telework and introduces new points regarding the modalities and implementation of telework. In January 2021, a general obligation was declared by the Minister of Labour through the Grand-Ducal regulation, making the national agreement on telework legally binding for all companies in the private sector. The agreement is contracted for three years and will be renewed as indefinite after this time, if it is not modified before then.

In **Belgium**, in January 2021, the social partners' body, the National Labour Council, adopted a new national collective agreement (Collective Labour Agreement (CLA) No. 149) which was only applicable for the pandemic period. This collective agreement is currently being used as a basis for negotiations for a new telework regulation (Q4 2022).

New topics introduced in collective agreements

The following new topics concerning teleworking have been mainly identified in Belgium and France.

- **The right to disconnect:** An increase in awareness regarding teleworking is visible following the pandemic when comparing the provisions on working time before the pandemic with more recent agreements, which grant the teleworker the right to disconnect.
- **OSH rules:** New agreements pay special attention to teleworkers in vulnerable settings, due to an increase in awareness regarding the risks of social isolation since the beginning of the pandemic. Detailed comparative information about these topics is included in the report *Telework in the EU: Regulatory frameworks and recent updates* (Eurofound, 2022a).

Overview of telework regulations in EU Member States

In this section, the content of telework regulations will be analysed and compared across countries using the legislation frameworks and collective bargaining in the EU27 and Norway as the basis for a comparative analysis.

The analysis mainly focuses on five key areas that are important for preventing negative impacts on teleworkers' working conditions, including the statutory definition of telework, the telework regime, the organisation of working time and the right to disconnect, OSH provisions.

For a more complete mapping of this content, see Annex 2.

National-level regulations

Statutory definitions of telework and types of telework covered

In most EU Member States, legal definitions stipulate that telework is to be performed on a regular basis, as set out in the social partners' EU Framework Agreement on Telework. However, regularity is considered

differently in Member States. In some countries, there is a threshold number of days, while in others, a percentage of time working remotely defines regular telework. In some of these countries, occasional and other forms of telework may be covered by collective agreements. However, in most countries, the national-level regulation leaves out legal coverage of occasional telework or at least occasional telework is not explicitly covered. However, the number of countries that include occasional telework is still significant, due to the number of employees in those countries.

Therefore, a large group of countries regulate only regular telework (such as Germany, Poland and Spain). In a second group of countries (Czechia and Estonia), there is a high degree of ambiguity, as there is no mention of whether telework should be regular or occasional to be considered legally telework. In a third group, working arrangements concerning telework are considered broadly (Bulgaria, Greece, Hungary, Portugal and Slovenia) and the countries in a fourth group comprise of those where regular and occasional forms of telework are explicitly differentiated and covered by regulation (Belgium, France, Italy and Luxembourg). All of the countries in this fourth group have national-level agreements.

Taking into account the findings in this chapter and Eurofound research on working conditions (Eurofound and ILO, 2017), regulations on telework should consider the frequency of telework and should avoid leaving out some forms of remote work that might be exposed to risks and challenging conditions, for example regular telework (hybrid or permanent), mobile telework and occasional telework.

Telework regime

Within the broad group of countries that have statutory legislation, a similar approach towards telework regime can be identified. With some minor exceptions, these countries require the telework regime to be set up through an individual agreement between the employer and the employee or in the employment contract. Written information about the agreement must be provided in most countries. However, the minimum content of the agreement varies from country to country and, in a few of these countries, this aspect is mostly set by collective agreements. Moreover, in most of these countries, the voluntary principle of telework is acknowledged, but no objective conditions for being eligible for telework are set, such as the teleworkability of a job or professional categories.

The right to request teleworking is a concept that goes beyond individual agreements because it gives the employee the right to access telework and, in principle, it can be rejected only if the employee does not meet certain conditions, for example having a role as a carer. However, this approach has been formalised in only a few countries (France, Lithuania and Portugal), although it is being developed in Germany and Ireland. Interestingly, in some countries, the right to reject telework by the employee is provided (Bulgaria, Malta and Romania). This aspect is of importance because of the contribution of telework to work–life balance as well as for the improvement of other working conditions (Chapter 2).

The right to return to a non-teleworking role exists in several countries (mainly in western Europe), but it is not explicitly included in the legislation of most eastern Member States. Moreover, the frequency and duration of telework is not considered in most countries and therefore this aspect largely depends on individual agreements or agreements at other levels (company or sector).

Organisation of working time and the right to disconnect

Around half of the Member States with legislation on telework have regulations that provide flexible working time for telework arrangements, including Czechia, Spain, Italy, the Netherlands, Slovakia and Luxembourg. Surprisingly, this is not recognised in the national-level regulation in a number of countries (mainly in central and eastern Europe, for example in Austria, Germany, Croatia and Latvia), although in some of them it is possible that this flexibility is addressed at sectoral or local level (for example, in Germany). Therefore, there is no consideration of an intrinsic characteristic of working time in telework arrangements in a number of European countries.

Despite the large body of evidence that suggests that telework and flexible working time can potentially improve work–life balance, only nine EU Member States highlight this role in regulations at national level (Belgium, France, Italy, Lithuania, Malta, Poland, Portugal, Romania and Spain). Analysis of the EWCTS 2021 has made it clear that when regulating telework, the work–life balance perspective should be considered and incorporated, which at the same time helps to address any gender imbalances.

Monitoring and recording working time is another aspect of telework that is specifically only regulated in some countries. Most of these regulations attempt to limit this behaviour. Written consent to be monitored must be requested, for example, or monitoring is restricted when it infringes on workers' privacy or workers' health, for example in Austria, Belgium, France and Malta. Some of the provisions place limits on the recording of working time, including respect for working

time flexibility (for example, Austria), while others seem to give full autonomy to the employer to establish the method of monitoring and recording working time, for example in Lithuania). Chapter 2 refers to the practice of recording working time as a way to mitigate the risk of employees working longer hours while teleworking.

Provisions related to the right to disconnect are among those that have been developed most during the pandemic. At the time of writing (Q2, 2022), France, Belgium, Spain, Italy, Luxembourg, Portugal, Greece and Slovakia have incorporated the right to disconnect in the legislation. However, differences exist in respect to content, coverage, requirements and methods of implementation. This variation arises from differences in industrial relations systems and adaptation to national practices at work. There were already some discussions in specific countries about new regulations on the right to disconnect before the pandemic, but the widespread adoption of telework in response to the health crisis has made the issue far more relevant. Consequently, the number of countries acknowledging or codifying the right to disconnect has doubled in the EU.

This is one of the most relevant topics for telework because the organisation of working time in these arrangements is different from working from employer's premises. However, there is a divide between EU Member States in relation to the emphasis on regulating working time specifically for telework arrangements and the limits that should be in place for recording and monitoring working time.

Occupational safety and health provisions

Due to the unique work environment of teleworking arrangements, considerations are being made as to whether there is a need to adapt OSH regulation to deal specifically with telework. The teleworking environment is different from the workplace because employers' preventive actions might be limited when it comes to employees' homes. On the one hand, it is necessary to ensure that an adequate standard of OSH provisions are available for teleworkers. On the other hand, setting high OSH standards (such as those that an employer must provide in its premises) can make teleworking almost impossible or might infringe on individual privacy regulations. Another issue relates to identifying who is responsible for OSH in teleworking settings. According to the EU Framework Directive on Safety and Health at Work, the employer is responsible for putting in place the preventive measures. However, access to employees' homes might be limited in some countries.

Different approaches are adopted by the Member States in terms of the implementation of risk assessments or inspections of employees' remote workplaces. However, the reality is that only a few countries have specifically put in place regulations addressing risk

assessments as a pre-condition for teleworking (Belgium, Croatia,²⁴ Germany, Greece and Spain).

The question that remains in both sets of countries (namely those with and those without specific regulations) is whether or not the risk assessment is actually carried out in telework settings. According to the European Survey of Enterprises on New and Emerging Risks undertaken by the European Agency for Safety and Health at Work, only about 30% of European establishments carry out risk assessments of telework settings (in teleworkers', only about 30% of European establishments carry out risk assessments of telework settings (in teleworker's homes).

Only a few countries have specific regulations on preventing musculoskeletal disorders (MSDs) while teleworking, most of them in western Member States (Belgium, France, Greece, Italy, the Netherlands, Portugal and Spain). A larger number of countries regulate psychosocial risks in telework environments by mainly targeting isolation (Belgium, Bulgaria, France, Greece, Italy, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Romania, Slovakia and Spain). However, the provisions are not very specific. The analysis shows that legal provisions provide only general recommendations, and in the case of psychosocial risks, which are the most prevalent health risks associated with telework (Eurofound, 2020b, 2021a), mostly focus on the problem of isolation (except in the case of Spain and, to a lesser extent, the Netherlands). The problem of isolation is acknowledged in the EU Framework Agreement on Telework. While the importance of this problem should not be undervalued, there are reasons to believe that the widespread use of more flexible telework arrangements in a context of non-COVID-19-related restrictions can contribute to improving this problem. In this sense, research has shown a general preference for hybrid work arrangements (Eurofound, 2021; Microsoft Work Trend Index, 2021). Hybrid or partial telework arrangements appear to provide the best balance between remote work flexibility and face-to-face interaction with managers and co-workers (Eurofound and ILO, 2017).

Recent research has also stressed the importance of other psychosocial risks for teleworkers beyond the problem of isolation. The problems of work intensification, overtime and irregular schedules have also been highlighted (Eurofound, 2020b; Oakman et al, 2020; EU-OSHA, 2021b). Chapter 2 of this report confirmed that employees teleworking during the pandemic were more likely to report these conditions, which have an impact on levels of stress, anxiety and risk of burnout. Therefore, actions taken to safeguard

OSH provisions in telework should go beyond isolation related issues. Moreover, it is also necessary to carry out the necessary actions for ensuring a proper physical environment to prevent, for example, headaches and eyestrain.

Compensation for telework-related expenses

The pandemic revealed issues regarding equipment in the context of telework, with 1 out of 10 employees reporting that they either did not have the right equipment or that employers did not provide the necessary equipment for teleworking (Eurofound, 2021a).

Regarding compensation, this aspect is regulated in most Member States with legislation, generally following the approach set out in the EU Framework Agreement on Telework. As a general rule, legislation stipulates that employers bear the entire responsibility for the provision, installation and maintenance of the equipment.

However, there are some differences in the legislation regarding the coverage of equipment (either an employees' own equipment or equipment provided by employers); whether expenses are covered, such as the energy used while teleworking at home; and the way that expenses are compensated (directly by the employer or indirectly through tax or social security contributions). Only a few countries have regulations stating that employers must cover the costs of teleworking that are not specifically related to equipment, such as training, communication and energy costs (Belgium, Estonia, France, Italy, Luxembourg).

In some countries, the compensation conditions are left to be agreed between the employee and the employer (Hungary, Romania and Slovenia). Compensation is not regulated in only two countries with specific statutory legislation on telework (Czechia and the Netherlands).

Other topics

Eurofound research has also explored how statutory legislation has dealt with other relevant aspects for employment and working conditions, namely equal treatment and employment conditions; geographical location; collective rights; data protection, privacy and surveillance; and gender equality.

General legislation regarding **equal treatment** and other aspects related to employment conditions apply to teleworkers in all Member States. However, some countries prefer to include specific provisions to ensure that the place of work does not have negative effects on defining or changing the employment status (Belgium,

24 In Croatia, occasional telework is excluded from mandatory risk assessment.

Bulgaria, Croatia, Greece, Italy, Lithuania, Luxembourg, Malta, Portugal and Spain).

Geographical location or the possibility of working remotely from another country, which could be a relevant issue to consider in the context of the EU labour market and mobility, is addressed only in Luxembourg, which establishes some limitations. With this precedent and even though the EU rules on social security coordination do not replace national systems, there might be room at EU level for practical developments to ease specific aspects of working remotely from abroad between Member States. Furthermore, there is the possibility to develop related provisions in agreements at company level.

In half of the countries with telework regulations, the **collective rights** of workers are safeguarded. The aim, depending on the country, is to ensure that information is provided and consultation takes place and the conditions for workers' representation are put in place.

Data protection, surveillance and monitoring are issues that affect all workers, not just teleworkers. However, in the context of remote work and the intensive use of digital technologies, these aspects have become more relevant. In half of the countries with legislation, data protection, surveillance and monitoring issues are addressed. Data protection is covered by EU legislation. Such regulation includes the principle of proportionality, information about the methods used, the need for written consent and restrictions about including monitoring tools within work-related apps. Interestingly, regulations in the Nordic countries addressing these issues foster negotiations and dialogue between workers and employers.

According to the information provided through the national contributions, no regulation has included aspects related to **gender equality** (except the national-level collective agreement), apart from the generic provisions with positive implications for work-life balance, which are expected to have a gender equality dimension. This is the case even though, at EU level, the European Economic and Social Committee (EESC) has addressed telework from the perspective of gender in its opinion entitled *Teleworking and gender equality - Conditions so that teleworking does not exacerbate the unequal distribution of unpaid care and domestic work between women and men and for it to be an engine for promoting gender equality (2021/C 220/02)*. Chapter 2 identified that women teleworking during the pandemic benefited less from this arrangement because of the gender inequalities related to unpaid work. Therefore, this is a consequence of gender relations and not because of teleworking. This phenomenon was exacerbated by the pandemic.

A summary of the content of telework legislation at national level is provided in Annex 2 of this report, while

Annex 3 summarises the content of national-level collective agreements.

Sectoral agreements

Sectoral collective agreements with provisions on telework (accompanied by statutory legislation and/or company-level agreements) play an important role in Austria, France, Italy, the Netherlands, Portugal, Slovenia and Spain (Figure 27). This is also the case for Denmark, although telework is regulated through the Occupational Safety and Health Act, in addition to far-reaching cross-sectional agreements, especially in the public sector. Interestingly, agreements made before the COVID-19 pandemic have been found in Nordic countries, highlighting a longer tradition of teleworking.

Collective agreements containing provisions on telework are found mainly in the manufacturing, financial and insurance, and information and communications sectors. They are least common in sectors involving outdoor activities unsuitable for telework, such as agriculture, forestry and fishing, mining and quarrying and construction. They are also rare in the extraterritorial organisations and household activities sectors. During the pandemic, the public services and administration, the education and the health and social work sectors experienced a notable increase in sectoral agreements on telework.

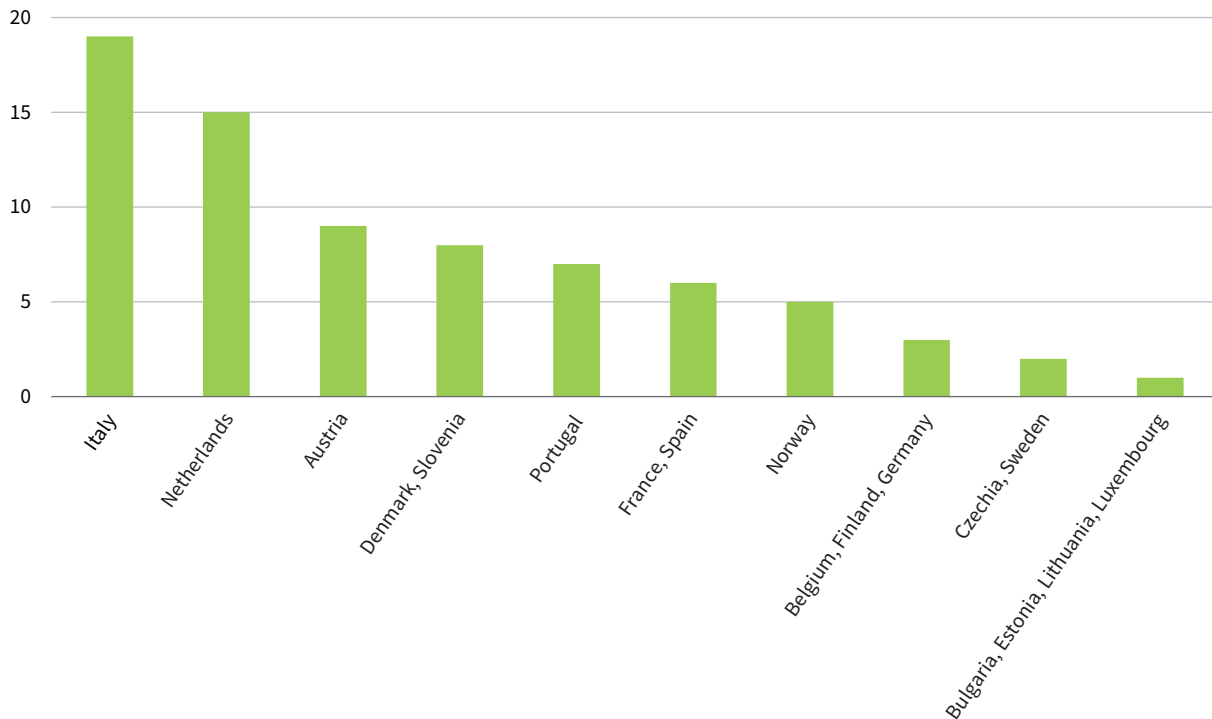
Most sectoral agreements include provisions on the formal procedure of the introduction of telework, as well as on access to telework. Provisions dealing with the organisation of work and working time are not very frequently represented in the sectoral-level agreements analysed, while an explicit right to request telework is hardly mentioned.

As in national-level regulation, among those provisions that deal with issues around working time, a general divide can be found between those that insist on compliance with regular (fixed) working hours during telework and those more focused on telework with flexible working time. An explicit right to disconnect is mentioned only in sectoral collective agreements from France.

Similar to the analysis of the content of statutory legislation, provisions on OSH mostly refer to risk assessments and the prevention of psychosocial risks, the latter emphasising the need to build on a relationship of trust between the teleworker and the employer as a preventive measure.

Aspects rarely covered by the aforementioned sectoral agreements on telework, which might be addressed at other levels of collective bargaining or in the statutory legislation, are access to ICT training and career development, accident insurance and employee liability and collective rights. The right to privacy and gender considerations are other aspects sparsely covered at sectoral level.

Figure 27: Number of sectors covered by sectoral agreements with telework provisions by selected Member States, 2021



Source: Contributions from the Network of Eurofound Correspondents

Company-level collective bargaining

Nearly all of the agreements were negotiated before 2020 and 2021, indicating that there was already a trend towards telework before the start of the pandemic at company level. Even older agreements, from the beginning of the 2000s, are reported from Denmark, Germany and Sweden, countries where collective bargaining at company level has been established for a long time. Companies with collective agreements on telework are prominently represented in the same sectors (finance and insurance, information and communications and manufacturing).

Access to telework is one of the topics most often covered in this sample of company agreements on telework. Telework is mostly granted on the basis of either the nature of the position or other criteria, such as the level of seniority or the quality of the teleworking space at home. Some agreements at company level give priority access to certain groups of employees, such as those with children, those with caring responsibilities for relatives, those with medical conditions, those with long commutes and student workers.

Provisions dealing with the organisation of working time are well represented in this sample of company-level agreements. As in the sectoral-level collective agreements, a general divide is found between the majority of provisions stressing compliance with maximum working hours and minimum rest periods

during telework and a minority that instead consider telework as a tool to promote work–life balance through greater working time flexibility.

An explicit right to disconnect is mentioned in several Dutch, French, Italian and Spanish company agreements.

The company-level provisions analysed mostly refer to risk assessments, which largely deal with access by the employer or the trade union representative to the teleworking space within the employee’s home. The prevention of psychosocial risks or MSDs were not found in the sample. Unsurprisingly, compensation for telework-related expenses is among the most common provision dealt with at company or workplace level, usually in the form of provisions establishing a monthly amount to be paid to the teleworker.

Other provisions deal with the frequency and duration of telework, which is often restricted to a certain number of days per week or month, which, in some cases, was increased in the wake of the pandemic. Aspects rarely covered by these company agreements on telework, which might be addressed at other levels of collective bargaining or in the statutory legislation, are the management of workload, guaranteed employment status, access to ICT training and gender considerations.

Teleworking arrangements may be established at company level outside formal collective bargaining.

Other important sources of collective provisions are local (or company-wide) agreements between management and works councils or staff representation bodies, as in Austria, Germany and Luxembourg. Similarly, teleworking conditions may be agreed upon after consultation and negotiation in joint cooperation bodies or between local trade union committees and management, as in Nordic and other countries.

Conclusions

In total, nine EU Member States have adopted new regulations on telework during the pandemic. In addition, there are at least four countries in which new relevant legislation was discussed and advanced by mid-2022. The regulations in these countries differ in terms of their comprehensiveness. The Portuguese, Slovakian and Spanish legislative texts address various aspects relating to employment and working conditions in telework, while the reforms in Austria, Greece, Latvia and Romania are of a more limited scope. Few countries have negotiated national-level collective agreements that update previous texts; in Belgium and France, national-level collective agreements incorporate provisions that strengthen the right to disconnect and include clauses requiring the protection of workers against the risk of isolation. The right to disconnect is also expected to be adopted in Luxembourg following the recommendation of the Economic and Social Council of this country.

The telework regime has been one of the most frequently addressed issues in the regulations, and Germany, Ireland and the Netherlands are discussing new legislation to introduce a right to request telework for employees.

Overall, the situation in some of these countries suggests that further amendments to telework regulations are needed, by legislation and/or social dialogue. In fact, in most of the countries with new provisions, social dialogue has played a fundamental role. For more detail on the content of regulations introduced through national-level agreements see Annex 3.

Provisions regulating telework at national level mainly cover definitions and access to telework. The latter is also covered at sectoral and company level. Few countries have adopted a specific right to request telework. A variety of approaches were developed as regards organisation of working time in telework arrangements and OSH issues. However, these aspects are also further developed at company level (working time and OSH) and sectoral level (OSH). In relation to compensation of expenses related to telework, even though most countries have regulations on this matter, the scope of aspects covered and the way it is compensated are diverse. Noteworthy gaps in regulation include the possibility of working remotely from another country, including in other EU countries (geographical location), as well as the gender dimension of teleworking and guarantees that the employment status of teleworkers is respected and in line with that of the employees who work at their employers' premises.

The diversity in relation to the way telework is regulated across EU Member States should be acknowledged. In some countries, there are national-level provisions covering certain issues related to telework, whereas in others, telework provisions are limited to certain sectors or specific company-level agreements. This chapter also highlighted the differences and uneven developments in working conditions and the way these problems are addressed.

4 | Conclusions

Telework has changed the world of work

Over the course of only a few short weeks in spring 2020, the implementation of physical distancing measures to combat the spread of COVID-19 led to many workers working from home all or most of the time. This shift contributed to maintaining employment levels with no negative implications for productivity. On the contrary, productivity increased in some cases.

There was a huge increase in the total number of employees working remotely in the EU. This unprecedented change may represent a shift to a new paradigm of work organisation and working conditions. It is becoming increasingly clear that this new world of work needs new regulatory frameworks, taking into consideration existing legislation and social partners' agreements.

Because of the expansion of telework, and therefore the increased flexibility around place and time of work, the pandemic has reshaped work organisation in a way that is likely to last. However, the pandemic has only partially changed telework. Many of the characteristics related to telework arrangements have not been substantially modified. Higher degrees of work autonomy, flexible working time, risks of working long hours and permanent connectivity and improvements in work-life balance, among other things, were typical of telework before the pandemic. In addition, with a few exceptions, the composition of the teleworking workforce has not changed significantly from what it was before the pandemic. It is made up of highly skilled workers, slightly more women than men, workers from mainly urban areas and those who work in the service sectors.

Any differences in telework before and since the start of COVID-19 are mainly related to the pandemic itself and the changes it has brought. These include making full use of technological developments so that teleworkable jobs can be carried out remotely, changes in work organisation, and, most importantly, an incipient cultural change characterised by managers increasingly trusting teleworking, and workers valuing flexibility as an important asset for improving their working and living conditions. As a result, groups of workers that traditionally did not telework, such as mid-skilled service workers, started and continued to telework.

In 2020 and 2021, some of the challenges of telework were specifically related to the pandemic, characterised by obligatory telework, lockdowns and school closures. In addition, most of those teleworking, and their managers, were unaccustomed to this new work arrangement, and society as a whole was under higher

levels of stress than in normal circumstances. Therefore, even though lessons must be learned from this period, it would be a mistake to think that teleworking will always be like it was during the pandemic. In the absence of pandemic-related factors that reduced the quality of work and life, including school closures, the experience of teleworking will improve. Throughout the pandemic, employees, and to some extent managers, have developed a clear preference for partial telework, commonly referred to as 'hybrid work'. This is because many see hybrid telework as a way to benefit from both on-site and remote work; a hybrid teleworker can flexibly manage their working time and decide on their place of work, in the framework of existing regulations and company policies, while still having face-to-face social interactions with co-workers and managers. However, this work arrangement is not exempt from risks such as increased working time and constant connectivity. In an attempt to make the benefits of telework a reality, and at the same time protect employees from the risks, changes are taking place in relation to the regulation of telework through legislative initiatives and collective agreements at national and EU levels. The research findings show that in some European countries the regulatory changes are minor, while in others they are more comprehensive and incisive. This points to differences across the EU in what is deemed to be relevant when regulating telework.

COVID-19 expanded the potential of telework

The share of employees working from home in the first years of the pandemic was estimated using a combination of EU-LFS microdata from 2020 and data for 2021. One important finding is that while the incidence of working from home expanded in all countries in 2020 and 2021 compared to 2019, the share of employees reporting working from home was notably lower than that reported in some 'live' COVID-19 surveys, including those conducted by Eurofound. Around one in five EU employees (18% in 2020 and 22% in 2021) reported working from home 'sometimes' or 'usually' during the pandemic, which is around double the levels of the previous years.

It is important to point out that there was an increase in the share of employees working from home prior to the pandemic. For this reason, the COVID-19 pandemic can be considered an 'accelerator' of this underlying trend. The introduction of physical distancing measures leveraged pre-existing changes in work organisation, work equipment, notably IT equipment, and workforce composition that were already increasing remote

working. The full potential of factors enabling the development of telework was unveiled during the pandemic: digital technology enabling remote work, technical teleworkability, flexible workplace location, new ways of organising work and life, and a culture of work based on achieving objectives rather than on the length of working time.

Both before and during the crisis, the uptake of remote work differed widely across Member States, with higher levels reported in the Benelux and Nordic Member States and much lower levels reported in the eastern European Member States, such as Bulgaria, Romania and the Baltic states.

The countries in which the prevalence of telework increased most during the crisis were Ireland, Luxembourg and Malta. Differences in the sectoral composition of employment, in the severity and timing of lockdowns and in technical infrastructure, for example broadband accessibility, are all factors likely to explain these differences between countries. The continued increase in working from home in 2021, observed in nearly all EU Member States, suggests that an increasing number of workplaces have adapted to remote and hybrid work arrangements as the pandemic has persisted. In fact, recent data from one European country, Spain, shows no difference in the share of employees teleworking in Q1 and Q2 2022 when all restrictions were removed. The only expected trend is the increase in occasional telework (those working ‘rarely’ or ‘sometimes’ from home) and the decrease of individuals teleworking usually (those working more than half of their working time from home).

Continuing with the quantitative perspective, the composition of the workforce teleworking during the pandemic looks very similar to that before the pandemic in relation to gender, age, sector and occupation. Only minor changes were experienced, like the relative slightly higher increase of telework among women compared to men.

Occupations and sectors with high prevalence of telework

The sharp rise in the prevalence of teleworking recorded in 2019 and 2020 was concentrated in better-paid, higher-level occupations and among those with third-level qualifications. The prevalence of working from home is heavily skewed. The type of work an employee does is an important factor in influencing whether or not an employee works remotely. Those employed in higher managerial and professional grades in knowledge-intensive service sectors have been much more likely to work from home both before and during the pandemic. If any change has taken place, it is because certain factors were overcome, enabling employees to telework if they wished; these factors include the teleworkability of jobs and the removal of social and cultural barriers that prevented teleworking

among some groups of workers, such as some mid-skilled occupations, including clerical staff.

The pandemic also confirmed the importance of having a teleworkable job and the level of autonomy and hierarchy involved with working remotely. Self-employed workers reported a higher prevalence of telework than employees, those in permanent jobs reported a higher prevalence of telework than temporary staff, and highly skilled workers reported a higher prevalence of telework than low-skilled workers. All groups experienced higher levels of autonomy and control over their work. However, it should be noted that telework has also expanded among mid-skilled workers, such as clerical support workers, because of the teleworkable nature of their jobs. It remains to be seen if they will continue to telework after the pandemic and, if they do so, how their working conditions will evolve in relation to autonomy and the monitoring of their work.

Another example of telework being widely used during the pandemic can also be seen from the greater increase in sectors with teleworkable jobs (for example, public administration and information and communications) than in other sectors.

No gender differences in uptake of telework

In most countries, the prevalence of working from home was somewhat higher among women than among men before the COVID-19 pandemic. This is still the case, although the difference (3 percentage points in 2021) is modest compared with the difference in the share of teleworkable jobs (15 percentage points). Therefore, a higher share of women than men have teleworked during the pandemic, mainly because more women than men work in teleworkable jobs. Male-dominated occupations and sectors – notably manufacturing and construction, but also agriculture – tend to be place dependent and involve a high number of physical tasks, which makes them less suitable for remote working.

Despite the general perception among the public and some policymakers that telework has a rather strong gender bias, women are only marginally more likely to telework than men, and the pandemic did not change this situation. Only when ‘usually’ working from home is considered are women more likely to telework. The gender bias associated with working from home during the pandemic was related to the lockdowns, including school closures, and the division of roles between women and men. In fact, the current higher share of women than men with care responsibilities and doing unpaid (domestic) work seems to only slightly increase the likelihood of teleworking. This is confirmed by the finding that there is no difference in the distribution of paid and unpaid work between women teleworking and those not teleworking, suggesting that teleworking in order to attend to care demands may have had only a small influence on the uptake of telework.

In short, there is no strong association between the gender division of roles and the expansion of telework and its uptake by women and men.

Technology extends working life for older workers

The prevalence of telework has also led to a higher share of 25- to 49-year-old employees teleworking during the pandemic. However, the group aged 65 years and over is still the most likely to telework, demonstrating the role of telework in reducing the negative effect of physical health problems on employees' ability to work. Older workers usually have more experience working in their companies and therefore they have already been through the process of socialisation, so communication and providing support to and receiving support from colleagues may be easier for them. Therefore, telework is expected to contribute to extending working lives in the future.

Telework as an urban phenomenon

Working from home is also skewed in terms of geographical distribution. The types of occupations that lend themselves to teleworking are overrepresented by employment share in large metropolitan areas. It is these more densely populated zones that have traditionally suffered more from longer commuting times, the impetus for the original push to remote working in the 1970s in the United States (Nilles, 1975). Another driver of the adoption of telework in cities was that during the crisis people in densely populated areas tended to experience more negative health outcomes as a result of the COVID-19 outbreak.

Because telework is an urban phenomenon, its role in reducing commuting and therefore carbon emissions should be considered since it might contribute to the green transition. However, this must be constantly monitored because of possible side-effects, including increased home energy use, as pointed out in the working paper *Is telework really 'greener'? An overview and assessment of its climate impacts* (Eurofound, 2022d).

Widening of inequalities

At aggregate level, more teleworkable occupations were associated with higher wages and fewer job losses during the pandemic. Therefore, it is possible that the pandemic further exacerbated the wage and employment gap between high- and low-skilled workers and workers with different educational levels. Moreover, with regard to working conditions, an increase in teleworking may widen the divide in relation to a third aspect: the potential for further autonomy and flexibility of work – privileges that are more often afforded to teleworkers.

Country-level differences

It is also important to understand that the future development of teleworking will not be uniform across countries. Technical, social, economic, cultural and regulatory frameworks facilitate higher shares of telework in some countries, for example Nordic and north-western European countries, than in others, for example several countries in eastern Europe. This will have implications for the uneven development of telework and therefore its relevance in all aspects of society.

Working conditions in the world of telework

Telework arrangements present the following work characteristics: a higher likelihood of working during free time, working long hours (more than 48 hours), working overtime (more hours than contractually foreseen), working non-standard and irregular hours, flexible working time, greater autonomy and the potential to improve work–life balance, and also the blurring of boundaries and difficulties in disconnecting outside working hours. Eurofound research has also shown an association with higher levels of stress and anxiety, risk of burnouts, headaches and eye strain (Eurofund, 2022a, 2022c).

Despite these risks, teleworking employees greatly value the flexibility associated with this work arrangement, and therefore there is a high degree of satisfaction with working conditions among employees able to telework. As a result, the vast majority of those working from home (fulltime or partially) during the pandemic would like to continue working remotely (most of them would prefer hybrid telework). In fact, previous research has shown that both hybrid and occasional telework showed better results in relation to productivity, working time quality, and health and well-being than full-time work at the employer's premises or full-time telework (Eurofound and ILO, 2017; Eurofound, 2019, 2022c).

It should be noted, however, that the findings reported here are affected by the pandemic situation, and it is not always easy to disentangle the impact of the pandemic on working conditions from the impact of telework in general on working conditions.

Working outside working hours and improvements in work–life balance

Working long hours and during free time continued to be issues associated with telework, compared to working at employer's premises. These issues were probably exacerbated by the pandemic. Findings also show that differences in working long hours between different telework arrangements, in terms of frequency of telework, were not as high during the pandemic as before the pandemic. Nevertheless, those in hybrid work and teleworking on an occasional basis are slightly less likely to report working long hours.

Those often working from home in a hybrid mode reported higher shares of working during their free time. However, this result may be related to specific pandemic-related lockdowns and school closures. Employees engaged in hybrid teleworking were more likely than those in other telework arrangements to reorganise their time rather than prolonging their working. It is estimated that for one-third of employees teleworking, working during their free time represented a reorganisation of working time rather than the prolongation of the working day. But for the majority (at least two-thirds) it implied working longer than expected (Eurofound, 2021a).

The consequence of this working time pattern (longer working hours and flexibility) is that employees in telework arrangements are more likely to work overtime, although the degree to which this is the case varies across the Member States. For instance, in France and Spain, telework seems to increase working time more than in Germany and the Netherlands. This extension of working time is likely linked to several factors, including issues related to the ‘always on’ culture such as working during free time, availability outside working hours, flexible working hours, working in several places or place flexibility, the absence of time recording schemes, the multiplication of digital communication channels with the company and workmates or the implementation of goal-based monitoring while teleworking (rather than than monitoring based on working time), among other reasons.

In this context, the ‘always on’ culture has become evident in some countries. There is extensive evidence showing that teleworkers experienced difficulties disconnecting during the pandemic, which extended the time that they were available to their employers (through emails, phone calls, virtual meetings, etc.) and caused them to work beyond contractual hours. The absence of a right to disconnect culture in many companies combined with the difficulties that teleworkers face in differentiating between working and resting periods is the crux of the problem. Managers and professionals in companies have found it particularly difficult to disconnect.

An interesting dynamic was found in relation to work-life balance. Although telework has generally improved the work-life balance of all employees, particularly those with children, there were gender differences. During the pandemic, women were more likely than men to do additional unpaid work (caring, housework and home-schooling), and as a result experienced less benefit from telework in terms of improved work-life balance. So even though gender roles do not push women to telework, once they telework, they often experience fewer improvements in their quality of life and work than men in the same situation.

This may be an inherent feature of full-time telework and hybrid work and so it should continue to be monitored in the future. The option of occasional telework (teleworking ‘rarely’ or ‘sometimes’) could also be further explored given that many women reported being better able to balance work and life with this teleworking arrangement.

Isolation and difficulties in management

Feelings of isolation were frequently reported during the pandemic, and these feelings were strongly correlated with hours worked from home. Work relationships were affected by teleworking, but not necessarily negatively. Employees teleworking during the pandemic did not report lower levels of social support than employees who worked only at their employer’s premises. However, some managers reported difficulties in communicating with employees, carrying out management tasks and supporting their employees. Despite the difficulties that managers face, digital tools used to monitor the performance of employees and their working times have not been extensively developed, although increases in the use of these tools have been reported in some countries. Moreover, the introduction of or increase in monitoring methods such as quality of outputs, use of online communication (email and video calls) and digital time monitoring was reported.

Employees in general felt that digital monitoring tools could have a negative impact on their well-being. Interestingly, the experience of increased monitoring while teleworking was particularly felt by employees with low levels of education.

These findings suggest we are still in a transition to a real culture of hybrid work, and in the process of adaptation, some challenges will be experienced.

Some negative well-being outcomes

There is mixed evidence on the consequences of telework practices during the pandemic for employees’ mental health and well-being, for example stress, anxiety and burnout. Several studies found that a high percentage of employees were affected by mental distress linked to obligatory telework and undesired consequences (longer working hours, difficulties in disconnecting, the blurring of the line between work and private life, and the use of monitoring software) and that managers found it more difficult to protect the well-being of their employees who were teleworking. Other available evidence, however, has shown that telework practices introduced during the pandemic resulted in positive mental health outcomes, including reduced levels of stress and higher levels of satisfaction at work. These findings may not be conflicting, as people in different circumstances had different relationships with telework. For instance, specific groups of employees were more likely to report worse mental health and well-being outcomes,

including workers and managers in the middle or top of the organisational hierarchy, teleworkers with (small) children, older workers, teleworkers whose superiors had weak digital or virtual management skills, hybrid workers and workers who were reluctant to telework.

Finally, the physical health of workers was also affected by pandemic-induced telework practices. The lack of suitable ergonomic conditions at home, including the lack of a proper teleworking space, absence of dedicated chair or desk and bad lighting conditions, also took a toll on the health of teleworkers.

Uneven impact of changes in telework regulations

The nature and extent of telework regulations vary widely across EU Member States, and they are affected by industrial relations systems, traditions and practices. The different regulations across Member States include countries with specific statutory legislation; countries with regulations embedded in labour codes or legislation on health and safety (or other work environment-related topics); countries without statutory definitions, with teleworking mainly regulated through collective agreements and other agreements; and countries with hardly any regulation.

While social dialogue at all levels can be recognised as a way to better develop and implement telework to protect the employment and working conditions of employees, it is possible that different combinations of regulation, policies and work cultures produce positive outcomes.

Impact of the pandemic on regulating telework

COVID-19 was an accelerator for regulating telework both in legislation and through collective bargaining. Since the beginning of the pandemic, 10 Member States have updated or adopted new legislation on telework and at least four more were involved in advanced discussions on new legal texts by the end of 2021. At company and sectoral levels, a considerable number of agreements on telework were developed, particularly in those sectors that already had agreements before the pandemic: financial services, manufacturing, and information and communications. In addition, during the pandemic, new agreements were developed in the public services and administration, education, and health and social work activities sectors. This shows that telework has become a consolidated modality of work organisation across the EU.

In general, before and during the pandemic, there was a similar set of countries (mainly from western and southern Europe) developing regulations through legislation and collective bargaining. This trend has accelerated, particularly with the same geographical and sectoral scope as before the pandemic (with the exception of Lithuania, Romania and Slovakia).

The changes and updates to the regulations have mainly concerned the telework regime, which includes access to telework and information to be provided to the teleworker by the employer, working time organisation, the right to disconnect and compensation for telework-related expenses.

Definitions, telework arrangements and challenges

Regular telework is not the only type of remote work with ICT. There are different ways of teleworking, including on an occasional basis or with a certain degree of mobility. In the EU, only a few national regulations (Belgium, France, Italy and Luxembourg) explicitly address occasional telework, while some examples of collective bargaining include this modality (Germany). Even the regularity of telework is regulated differently across EU Member States, based on either a threshold number of days or a percentage of time working remotely.

In this context, in around half of the EU Member States, employees working remotely on an occasional basis can be excluded from the telework regime and therefore, for example, from mutual written agreements or the right to disconnect. Therefore, the term ‘regular telework’ (used in the EU social partners’ autonomous framework agreement of 2002) falls short when addressing the current and future landscape for remote work arrangements.

Differences in provisions protecting employees

Overall, regulation on telework in Member States shows that there are some topics commonly regulated at national level, such as the telework regime, while other topics are regulated in only a few countries, such as working time in telework arrangements.

Telework regime rules apply in most statutory legislations and most follow a similar approach. They require that an individual agreement must be set up between the employer and the employee or in the employment contract. Although the voluntary principle of telework is acknowledged in legislation in most countries, objective conditions for a worker to be eligible for telework, for example teleworkability and professional categories, are not usually established in national-level regulation.

Employees in teleworkable jobs may be entitled to request telework through a right to request. This right was established in only a few countries, with legislation also having been developed in an additional three countries by the end of 2021. These provisions aim to improve the opportunities for workers to decide the place (and in some countries the time) of work, adapting those dimensions to their needs, including in terms of work–life balance and well-being.

This is one of the issues that is regulated at national, sectoral and company levels.

In relation to the **organisation of working time**, there is a group of countries (mainly in central and eastern Europe) that rely on standard regulation for work carried out on employers' premises for regulating working time in telework arrangements. In another group of countries (mainly in southern and western Europe), flexibility in the organisation of working time is included in the regulation on telework. Two conclusions can be drawn from this situation.

1. In some Member States, working time regulation is not adapted to employees' specific situation of teleworking, namely in those in which flexible working time is a common feature in remote work arrangements. Such flexibility has been shown to have the potential to improve work-life balance and the well-being of workers.
2. There is a divide in Europe about how to address, in national-level regulation (and to some extent in sectoral agreements), issues related to working time in telework arrangements. Some countries rely on existing regulations that apply to work carried out at employers' premises, while others have developed new legislation that addresses the unique qualities of telework.

In any case, collective agreements at company level also address flexibility in working time, which occurs especially in countries with strong social dialogue, such as Germany and Scandinavian countries.

Although recording working time has been proven to limit challenges related to problematic working time patterns, such as long working hours, it is not specifically addressed in some Member States.

Finally, the expansion of telework during the pandemic has fuelled existing debates on **the right to disconnect**, resulting in newly adopted legislation in some Member States. As a result, the number of countries including the right to disconnect in national legislation doubled during the pandemic, although differences exist in respect to content, coverage, requirements and methods of implementation. At EU level, the European Parliament approved an initiative on the right to disconnect and fair telework, and an explicit right to disconnect is mentioned in several collective agreements at company level (France, Italy, the Netherlands and Spain). The findings show that this will continue to be a debatable issue in a context where overtime is more likely to happen in telework arrangements.

Health and safety issues in teleworking pose challenges to the practical application of some principles that are enshrined in OSH legislation. Only a few countries (Belgium, Croatia, Germany, Greece, the Netherlands and Spain) have specifically put in place regulations addressing risk assessments as a pre-condition for

allowing telework. These regulations are not uniform, however, and countries have implemented different risk assessments. In those countries with no specific regulation, it remains to be seen how risk assessments will be carried out, even though general provisions in the EU Framework Directive on Safety and Health at Work apply.

Several countries regulate psychosocial risks, targeting mainly, or only, isolation. In such regulations, companies are required to provide employees with a contact from the company and to facilitate workers' presence at the employer's premises. Recent research has also stressed the risk of further psychosocial risks for teleworkers in terms of work intensification, overtime and irregular schedules. These aspects seem to be addressed mostly in sectoral level agreements, while national legislation provides only recommendations. In relation to physical risks, the issue of space and work-related furniture and equipment should be part of a risk assessment.

In relation to **equipment and compensation for costs**, as a rule, national legislation, following the EU Framework Agreement on Telework, states that employers must bear the full responsibility for providing the equipment necessary to telework. However, research evidence shows that a significant proportion of workers have not received equipment from their employers, at least not during the pandemic. In this respect, important differences by sector exist. Therefore, it seems that there might be an enforcement issue in this regard. Moreover, diverging regulations exist in Member States regarding the installation, maintenance and financial coverage of work equipment; the coverage of other expenses while teleworking at home, such as communication and energy costs; and the way such expenses are compensated (directly by employers or indirectly through tax or social security contributions). Regulations dealing with the compensation of these costs related to equipment and energy expenses have been found in collective agreements, mainly at company level, with different approaches and solutions provided. In some cases, these agreements may be reached individually between the employee and the employer.

Provisions on **geographical location** and particularly teleworking abroad were found only in Luxembourg, which has developed bilateral cross-border agreements with Belgium, France and Germany to avoid double taxation and to prevent tax evasion. However, there are also no regulations prohibiting working remotely from abroad. Geographical location is addressed in only some company-level agreements, but they mainly define places of work within a region or regions within a Member State. In the context of the European labour market and the mobility of workers, this issue could be subjected to EU-level regulation.

The **collective rights** of teleworkers are mentioned in half of the countries with telework regulation. Such regulation ensures that information and consultation takes place and that the conditions for teleworkers' representation are put in place.

Apart from the generic provisions about work–life balance, which are expected to have gender equality implications, no regulation has been included on **gender equality** aspects in national-level legislation (except in the 2020 French ANI). Provisions on gender equality are found in only a few sectoral-level agreements. The legislation appears insufficient in this regard, particularly in terms of the potential risks for career development when women telework regularly from home, as this situation involves a lack of visibility for career development.

Another important aspect that is scarcely included in national regulations is the potential of telework for including **workers with medical conditions or workers with a disability** in the labour market. Only a few sectoral and company-level agreements have addressed this aspect.

Finally, from the information provided by social partners and gained from previous assessments, it can be concluded that the adaptation of regulations on working conditions to telework is still ongoing and has not been finalised in several EU Member States, at least in relation to key elements concerning telework arrangements.

Likely future trends for telework

The future of the world of work has been shaped by the pandemic. It is estimated that at least 20% of employees teleworking in 2021 would not have been doing so until 2027 had the health crisis not occurred. It is very likely that at the end of 2022 the prevalence of telework at EU level will slightly decline (as has already happened in some countries during the first quarter of the year). However, this decline will only be temporary. In fact, in some countries, such as Spain and Germany, there was a trend towards the share of employees teleworking remaining stable in the second and third quarter of 2022. Among other drivers of telework, the increasing prevalence of teleworkable jobs will create an increase in the number of European employees teleworking, either full-time or in a hybrid mode. And although the increase in telework may not occur as quickly as was seen during the pandemic, the pandemic has ensured that telework will begin from a higher base level. It is also important to recognise that the evolution of telework will vary in different parts of Europe because the factors contributing to its development (the structure of the economy, culture of work, and number of teleworkable jobs) are not equally distributed or are simply different.

This upward trend in teleworking will take place because access to technologies will expand, and so will the quality of these technologies. At the same time, the number of teleworkable jobs will increase. However, not all sectors and occupations will be equally affected by this trend. In some occupations where social interaction adds significant value, the adoption of full-time telework is unlikely. In this context, partial or hybrid telework will be common in the European labour market for employees in teleworkable jobs. Employees' and employers' preferences will also contribute to this trend. The number of telework policies has been increasing at company level and employees have several reasons for teleworking.

The impact of the expansion of telework among some groups of workers, such as service and clerical workers (or the democratisation of telework through its dissemination in these occupations) may provide advantages such as autonomy and working time flexibility that these groups of workers did not benefit from before the pandemic. However, it is yet to be confirmed whether or not the advantages that have been observed during the pandemic will remain in the long term for mid-skilled workers. Particularly, because telework can be developed in conjunction with digital monitoring of working time which poses possible risks for individual privacy.

The main driver of employees' attitudes towards teleworking is that it leads to a new form of work organisation characterised by greater autonomy and flexibility in employees' use of time as well as where they live and work.

This report shows the importance of existing national and company cultures for explaining different telework implementation patterns, particularly in relation to respect for employees' right to disconnect and work–life balance, flexibility of working time, autonomy and self-management of working time, and adaptation to hybrid work. The benefits or disadvantages of telework are not equally distributed across countries, in particular in relation to overtime, work–life balance and health effects such as anxiety. Therefore, efforts to address the different challenges might focus on some issues more than others depending on the country.

Looking to the future, both workers and, to a lesser extent, employers are in favour of continuing telework practices, either full-time or combined with work at the employer's premises (hybrid work). Hybrid models are particularly well liked because they can address some of the issues that were experienced during the pandemic, such as isolation and difficulties in management. However, even these telework arrangements come with challenges, such as increased working time and constant connectivity. As more employees and employers gain further experience in telework, it is possible that these challenges could be overcome. For example, managerial styles could be better adapted to

hybrid work environments, and ICT could be used in a more efficient way. New technological developments and training are also likely to contribute to addressing telework-related challenges.

The regulation of telework is key to ensuring that the continued adoption of teleworking practices is beneficial to workers. Regulatory frameworks serve to improve the work–life balance of teleworkers; reduce risks associated with teleworking, including feelings of isolation; and protect employees' rights. At the same time, regulation should facilitate two aspects that are intrinsic to telework arrangements: autonomy and flexibility. These have the potential to increase well-being, work satisfaction and motivation, and therefore productivity.

Many issues related to telework still need to be addressed: access to telework and the right to request telework (established procedures to decide if an employee may telework), the implementation and coverage of the right to disconnect, health and safety responsibilities and risk assessments, place of work in the European context, and telework as a way for older workers and more disadvantaged groups, including workers with medical conditions or workers with a disability, to access the labour market.

The expansion of telework may also increase inequalities between workers: whether or not employees can telework may have serious implications

for wages, job security and work–life balance. However, these issues can be addressed only if there is a clear understanding that they are not only related to telework, but also that work organisation in general is undergoing a fundamental change.

The regulation of telework at EU level might ensure minimum standards to ensure a level playing field. However, this report has clearly shown that properly managing the shift towards more widespread telework will also require specific national, sectoral and company-level policies. Benchmarking and exchanging good practices at EU level can support this process. Notwithstanding this, mapping regulations in Europe showed that telework regulations are easier to implement with strong social dialogue, leading to agreements that benefit both workers and employers.

Therefore, it remains to be seen if current regulatory changes will be of a limited scope, affecting only a number of countries, or if there will be an important reshaping of labour regulations to take into account the new world of work at national and EU levels.

Finally, this report has highlighted some possible future trends of telework, but ultimately the future of work will depend on practices, regulations and values which will be shaped by workers, employers, policymakers and society in general. These collective decisions will decide the future of telework.

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Annexes

Annex 1: Determinants of teleworking in the EU: Logit estimates

	Full sample			2019			2020		
	M1 WFH	M2 Sometimes	M3 Usually	M4 WFH	M5 Sometimes	M6 Usually	M7 WFH	M8 Sometimes	M9 Usually
Ref: male									
Female	1.066*** (0.0141)	0.980 (0.0170)	1.148*** (0.0206)	1.014 (0.0170)	0.970 (0.0197)	1.082** (0.0272)	1.132*** (0.0241)	0.999 (0.0315)	1.198*** (0.0301)
Ref: 25–54									
15–24	0.605*** (0.0217)	0.636*** (0.0293)	0.608*** (0.0317)	0.599*** (0.0233)	0.651*** (0.0310)	0.573*** (0.0361)	0.622*** (0.0382)	0.626*** (0.0560)	0.634*** (0.0487)
55–64	0.921*** (0.0140)	0.815*** (0.0161)	1.041 (0.0216)	0.895*** (0.0169)	0.808*** (0.0185)	1.065* (0.0298)	0.955 (0.0239)	0.830*** (0.0300)	1.024 (0.0307)
65+	1.351*** (0.0636)	0.959 (0.0630)	1.723*** (0.101)	1.379*** (0.0779)	0.885 (0.0704)	2.107*** (0.143)	1.290** (0.103)	1.084 (0.121)	1.320** (0.123)
Ref: upper secondary									
Low: lower secondary	0.742*** (0.0231)	0.677*** (0.0314)	0.794*** (0.0315)	0.845*** (0.0353)	0.706*** (0.0439)	1.004 (0.0533)	0.651*** (0.0300)	0.629*** (0.0429)	0.679*** (0.0394)
High: third level	1.703*** (0.0252)	1.738*** (0.0330)	1.649*** (0.0342)	1.718*** (0.0309)	1.748*** (0.0380)	1.643*** (0.0442)	1.687*** (0.0411)	1.706*** (0.0609)	1.666*** (0.0490)
Income	1.156*** (0.00378)	1.196*** (0.00506)	1.119*** (0.00510)	1.174*** (0.00488)	1.221*** (0.00630)	1.096*** (0.00680)	1.138*** (0.00585)	1.161*** (0.00834)	1.129*** (0.00714)
Ref: towns									
Rural areas	0.969 (0.0165)	0.965 (0.0211)	0.980 (0.0234)	0.973 (0.0200)	0.942* (0.0237)	1.041 (0.0314)	0.992 (0.0287)	1.019 (0.0420)	0.957 (0.0340)
Cities	1.144*** (0.0150)	1.127*** (0.0190)	1.145*** (0.0207)	1.066*** (0.0175)	1.104*** (0.0214)	0.978 (0.0248)	1.258*** (0.0270)	1.186*** (0.0378)	1.270*** (0.0324)
Ref: full-time									
Part time	1.146*** (0.0220)	1.201*** (0.0277)	1.076** (0.0292)	1.276*** (0.0288)	1.327*** (0.0351)	1.120*** (0.0381)	1.002 (0.0331)	1.035 (0.0449)	0.980 (0.0396)
Ref: permanent									
Temporary	1.040 (0.0251)	1.048 (0.0327)	1.032 (0.0347)	1.081** (0.0316)	1.122** (0.0400)	1.047 (0.0461)	0.995 (0.0407)	0.927 (0.0547)	1.041 (0.0516)
Ref: less than 5 years									
Less than 1 year	0.896*** (0.0207)	0.903*** (0.0263)	0.882*** (0.0294)	0.839*** (0.0233)	0.847*** (0.0282)	0.810*** (0.0341)	0.964 (0.0379)	1.011 (0.0560)	0.929 (0.0454)
5 years or more	1.006 (0.0152)	0.986 (0.0186)	1.038 (0.0222)	0.992 (0.0187)	0.954* (0.0212)	1.115*** (0.0327)	1.022 (0.0252)	1.038 (0.0354)	1.003 (0.0301)
Ref: 11–49									
1–10	1.299*** (0.0252)	1.088** (0.0282)	1.460*** (0.0377)	1.495*** (0.0358)	1.100** (0.0331)	2.147*** (0.0706)	1.110*** (0.0351)	1.068 (0.0497)	1.097* (0.0419)
50 or more	1.116*** (0.0154)	1.056** (0.0190)	1.186*** (0.0230)	1.047** (0.0183)	1.058** (0.0225)	0.992 (0.0262)	1.217*** (0.0270)	1.050 (0.0340)	1.353*** (0.0367)
Ref: primary									
Mainly private services	1.419*** (0.0254)	1.424*** (0.0318)	1.482*** (0.0385)	1.305*** (0.0292)	1.420*** (0.0363)	1.167*** (0.0447)	1.592*** (0.0463)	1.440*** (0.0607)	1.751*** (0.0620)
Mainly public services	1.281*** (0.0236)	1.144*** (0.0264)	1.514*** (0.0394)	1.314*** (0.0294)	1.130*** (0.0295)	1.932*** (0.0697)	1.256*** (0.0384)	1.173*** (0.0513)	1.301*** (0.0481)

	Full sample			2019			2020		
	M1 WFH	M2 Sometimes	M3 Usually	M4 WFH	M5 Sometimes	M6 Usually	M7 WFH	M8 Sometimes	M9 Usually
Ref: clerical support workers									
Managers	2.322*** (0.0640)	2.782*** (0.0959)	1.757*** (0.0705)	3.139*** (0.103)	3.314*** (0.126)	2.443*** (0.128)	1.712*** (0.0803)	2.126*** (0.139)	1.478*** (0.0845)
Professionals	2.654*** (0.0551)	2.837*** (0.0802)	2.468*** (0.0685)	3.386*** (0.0892)	3.253*** (0.104)	3.526*** (0.140)	2.165*** (0.0709)	2.307*** (0.119)	2.097*** (0.0798)
Technicians and associate professionals	1.023 (0.0217)	1.181*** (0.0341)	0.889*** (0.0257)	1.177*** (0.0320)	1.329*** (0.0431)	0.870** (0.0383)	0.915** (0.0299)	0.996 (0.0523)	0.881*** (0.0335)
Service and sales workers	0.523*** (0.0144)	0.430*** (0.0163)	0.600*** (0.0218)	0.771*** (0.0267)	0.517*** (0.0233)	1.149** (0.0576)	0.364*** (0.0158)	0.328*** (0.0215)	0.396*** (0.0210)
Skilled agricultural workers	0.401*** (0.0353)	0.305*** (0.0413)	0.499*** (0.0547)	0.719** (0.0725)	0.391*** (0.0664)	1.216 (0.147)	0.211*** (0.0336)	0.213*** (0.0471)	0.215*** (0.0461)
Craft and related trades workers	0.192*** (0.00779)	0.244*** (0.0125)	0.146*** (0.00940)	0.299*** (0.0144)	0.301*** (0.0167)	0.310*** (0.0276)	0.123*** (0.00877)	0.177*** (0.0180)	0.0863*** (0.00832)
Plant and machine operators	0.102*** (0.00588)	0.118*** (0.00929)	0.0881*** (0.00711)	0.188*** (0.0127)	0.159*** (0.0144)	0.261*** (0.0254)	0.0526*** (0.00553)	0.0754*** (0.0111)	0.0373*** (0.00546)
Elementary occupations	0.176*** (0.00959)	0.185*** (0.0152)	0.167*** (0.0120)	0.287*** (0.0195)	0.229*** (0.0233)	0.366*** (0.0334)	0.108*** (0.00969)	0.134*** (0.0184)	0.0957*** (0.0113)
2020	2.171*** (0.0310)	1.227*** (0.0229)	4.215*** (0.0848)						
Constant	0.0454*** (0.00167)	0.0246*** (0.00117)	0.0182*** (0.000927)	0.0347*** (0.00160)	0.0189*** (0.00105)	0.0150*** (0.00109)	0.0984*** (0.00584)	0.0497*** (0.00423)	0.0487*** (0.00343)
Observations	1,353,680	1,280,148	1,263,343	871,341	843,998	813,829	482,339	436,150	449,514
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	No	No	No	No	No	No
Pseudo R²	0.313	0.334	0.276	0.297	0.329	0.203	0.321	0.344	0.286

Note: Exponentiated coefficients; numbers in parentheses are standard errors. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. FE, fixed effect; Ref, reference; WFH, working from home.

Source: Authors' elaboration, based on EU-LFS data

Annex 2: Mapping the content of key legislative provisions

Member State	Telework regime	Gender and work-life balance	Flexible working time (legislation that establishes that teleworkers can organise their working time themselves)	Workload management (specific legal provisions)	Specific provision for recording working time	Right to disconnect or other connection/disconnection clauses	Risk assessment (a pre-condition for being allowed to telework)	Psychosocial risks (specifically isolation)	Provision of equipment and costs coverage	Limitations to monitoring, surveillance and data protection	Collective rights
Austria											
Belgium									Only for regular telework		
Bulgaria			Breaks and rest periods only								
Croatia											
Cyprus											
Czechia											
Denmark											
Estonia											
Finland					Flexible work						
France			Breaks and rest periods only		ANI						
Germany											
Greece											
Hungary											
Ireland	Legislation					Code of practice		Non-legally binding			
Italy		Agile work	Only for agile work						Only for regular telework		
Latvia											
Lithuania											
Luxembourg						Legislation					
Malta											
Netherlands											
Norway											

Member State	Telework regime	Gender and work-life balance	Flexible working time (legislation that establishes that teleworkers can organise their working time themselves)	Workload management (specific legal provisions)	Specific provision for recording working time	Right to disconnect or other connection/disconnection clauses	Risk assessment (a pre-condition for being allowed to telework)	Psychosocial risks (specifically isolation)	Provision of equipment and costs coverage	Limitations to monitoring, surveillance and data protection	Collective rights
Poland	Blue	Blue							Blue		
Portugal	Yellow	Yellow				Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Romania			Blue		Blue			Blue			
Slovakia	Yellow		Yellow			Yellow			Yellow	Yellow	
Slovenia	Blue								Blue		Yellow
Spain	Yellow		Yellow		Yellow	Yellow	Yellow		Yellow	Yellow	Blue
Sweden								Non-legally binding			

Notes: Blue cells represent regulations adopted before the pandemic. Yellow cells represent provisions that were new in 2020 or 2021.
 Source: Authors, based on national contributions by the Network of Eurofound Correspondents

Annex 3: Mapping key provisions in national-level collective agreements

Provisions	Belgium	France	Italy	Luxembourg	Estonia (non-binding)
Telework regime					
Voluntary	X	X	X	X	X
Right to request	X	X			
Right to return	X	X	X	X	X
Mutual agreement	X	X	X	X	X
Information to be provided on OSH, contact, expenses, adaptation, privacy, training, etc.	X	X	X	X	X
Organisation of work					
Same duration of working time as at employers' premises	X	X	X	X	X
Workload		X			
Flexibility				X	X
Monitoring (proportional and information provided)	X	X	X	X	
Broad coverage of organisation of work		X			
Work-life balance directly or indirectly covered (more in newer agreements)	X		X	X	
Right to disconnect plus provisions on availability and disconnectivity	X	X			
OSH					
Risk assessment (prior notification and consent required)	X	X	X		
Request for risk assessment	X	X	X	X	
MSD information	X	X		X	X
Prevention of psychosocial risks (isolation prevention)	X	X	X	X	X
Compensation					
Equal pay	X			X	X
Coverage of expenses related to telework implementation at employees' home	X	X	X	X	X
Others					
Home and co-working spaces covered	X	X	X	X	X
Geographical location		X			
Equal conditions to those at employers' premises	X	X	X	X	X
Gender equality		X			
Integration of workers with chronic disease or disability		X			
Training in ICT and/or working remotely	X	X	X	X	
Equal access to training	X	X	X	X	X
Career development		X			
Surveillance	X	X	X		X
Collective rights	X	X	X	X	X
Specific measure on collective rights	X	X			
Information on changing telework conditions	X	X	X	X	X

Source: Authors, based on national contributions by the Network of Eurofound Correspondents

Annex 4: Network of Eurofound Correspondents

Country	National correspondent	Organisation
Austria	Bernadette Allinger	Working Life Research Centre (FORBA)
Belgium	Yennef Vereycken and Dries Van Herreweghe	HIVA – Research Institute for Work and Society, KU Leuven
Bulgaria	Ivan Neykov	The Balkan Institute for Labour and Social Policy
Croatia	Predrag Bejaković	Institute of Public Finance
	Irena Klemenčić	Faculty of Law, University of Zagreb
Cyprus	Loucas Antoniou	Cyprus Labour Institute (INEK-PEO)
Czechia	Renata Kyzlinková	Research Institute for Labour and Social Affairs (VÚPSV)
Denmark	Nanna Sklander, Signe Sbildskov Peterson and Louise Madsen	Oxford Research
Estonia	Ingel Kadarik	Praxis Center for Policy Studies
Finland	Amanda Kinnunen	Oxford Research
France	Frédéric Turlan	IR Share
Germany	Sandra Vogel and Marc Breitenbroich	German Economic Institute (IW)
Greece	Elena Kousta	Labour Institute of the General Confederation of Greek Workers (INE GSEE)
Hungary	Nora Krokovay	Kopint-Tárki Institute for Economic Research
Ireland	David Murphy	IRN Publishing
Italy	Lisa Dorigatti	Università degli Studi di Milano
Latvia	Raita Karnīte	EPC Ltd
Lithuania	Ramune Guobaite-Kirsiene, Rasa Mieziene and Inga Blaziene	Lithuanian Centre for Social Sciences
Luxembourg	Franz Clement, Fanny Robert and Nicaise Misangumukini	Luxembourg Institute of Socio-Economic Research (LISER)
Malta	Anna Borg	Centre for Labour Studies, University of Malta
Netherlands	Paul Vroonhof and Thomas de Winter	Panteia
Norway	Kristin Alsos	Fafo Institute for Labour and Social Research
Poland	Jan Czarzasty	SGH Warsaw School of Economics and Institute of Public Affairs
Portugal	Maria da Paz Campos Lima and Heloisa Perista	Centre for Studies for Social Intervention (CESIS)
Romania	Raluca Dimitriu and Nicoleta Voicu	European Institute of Romania
Slovakia	Miroslava Kordosova	Institute for Labour and Family Research
Slovenia	Barbara Lužar	Faculty of Social Sciences, University of Ljubljana
Spain	Alejandro Godino	Centre for Sociological Studies on Everyday Life and Work, Autonomous University of Barcelona
Sweden	Anna-Karin Gustafsson and Nils Brandsma	Oxford Research

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This report presents Eurofound's research on telework during the COVID-19 pandemic in 2020 and 2021. It explores changes in the incidence of telework, working conditions experienced by employees working from home and changes to regulations addressing issues related to this working arrangement. The findings reveal a rapid escalation of telework triggered by the pandemic: in 2021, 2 out of 10 European employees were teleworking – a figure that most likely would not have been reached before 2027 had the pandemic not occurred. The health crisis unleashed the social and technological potential for flexibility in terms of working time and place. The impacts of telework on working conditions were initially difficult to determine because it was difficult to disentangle them from pandemic-induced factors, such as lockdowns and school closures. However, both the positive impacts, such as the contribution of telework to improving work–life balance, and the negative impacts, such as reduced social interaction and an increase in overtime worked, have become more evident. The rise in telework and an awareness of its implications for working conditions have prompted a renewed focus on regulatory frameworks, with new telework regulations passed in several EU Member States.

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.

