

Remote working across the European Union before and in Covid-19 pandemic

CALL VP/2020/004 G.A. no VS/2021/0200

Table of Contents

Table of Contents	2
1. Defining framework and key issues on remote working before and after Covid-19	3
Introduction.....	3
1.1 A defining framework.....	3
1.2 Regulation of remote working in the EU pre-Covid-19.....	5
1.3 National regulations in a comparative perspective	6
1.4 Remote working in the EU, before and after Covid-19 pandemic.....	8
1.5 Degree of Teleworkability	17
1.6 Effects and desirability of remote working	18
1.7 Concluding remarks.....	21
2. Remote working across the EU - a comparison between five member States: France, Italy, Poland, Romania, Spain	22
Introduction.....	22
2.1 Remote working in the five selected countries – a summary.....	22
France	22
Italy	25
Poland.....	28
Romania.....	30
Spain	32
2.2 A comparative overview across the five selected countries	36
Diffusion of remote work during the pandemic.....	36
Changes in national regulations of remote work after the Covid-19 outbreak	38
Positive and negative aspects related to remote working	40
From the problem to the solution: the role of social partners during the pandemic.....	43
3. Concluding remarks and policy implications	46

1. Defining framework and key issues on remote working before and after Covid-19

Introduction

The Covid-19 outbreak has certainly changed our working and living conditions. As social distancing was introduced as a form of health restriction to reduce contagion, many governments strongly encouraged minimising physical presence at work. In line with the Governments' recommendations, a large number of businesses accelerated the use of remote work, with personnel working mainly from home and using ICT and digital devices as laptops, smartphones, videoconferencing, cloud services and private and public networks.

1.1 A defining framework

Policymakers, social parts, businesses, employees, media and citizens became familiar with a broad use of words such as remote working, teleworking, working from home, mobile worker, ICT-based worker. One problem is that, despite a growing use of the terms, there is not a common accepted definition among the European Members for when the work takes place outside the company's premises¹. Different definitions are adopted, depending on the place of work, the intensity of ICT usage, the distribution of time between the office and other locations². While some studies focus on specific types of remote work some others analyse it with a different approach, that leads to different conclusions and results which impede to have a single and unique perspective on the issue as well as comparable data. Currently, different countries are using slightly different and often overlapping definitions.

In this view, it is of crucial importance to define a general conceptual framework related to the terms referred to when a person works from a distance. Even though there is no international statistical definition, the term "remote work" can be considered the broadest concept as it refers to situations in which the work is fully or partly carried out at an alternative worksite than the default place of work³: "working anytime, anywhere". Both dependent and independent workers can be regarded as remote workers if they perform just one part of their work away from their default worksite. Based on the criteria used to observe remote working, two different but often overlapping conceptual clusters can be identified:

- A "remote work" cluster based on the criteria of mobility and the intensity of ICT usage: **telework and ICT-based mobile work (TICTM)**. This term refers to any type of work arrangement where workers (dependent and independent) work remotely, and so outside the employer's premises, using digital technologies and ICT devices. It is possible to distinguish four types of TICTM based on degree of mobility, use of ICT and employment status:

¹ Eurofound and the International Labour Office (2017), Working anytime, anywhere: The effects on the world of work, Publications Office of the European Union, Luxembourg, and the International Labour Office, Geneva

² CBS and TNO (2014), Nationale enquête arbeidsomstandigheden [Netherlands working conditions survey], available at <http://www.monitorarbeid.tno.nl/publicaties/netherlands-working-conditions-survey>

³ According to ILO definitions, the "The default place of work can be understood as the place or location where the work would typically be expected to be carried out, taking into account the profession and status in employment" - ILO (2020) "Defining and measuring remote work, telework, work at home and home-based work". ILO policy brief.

- regular home-based: employees who frequently use ICT to work from home
 - highly mobile: employees who frequently use ICT to work and have a high level of mobility
 - occasional: employees who occasionally use ICT to work from locations other than their employer’s premises
 - self-employed: self-employed workers who occasionally or frequently use ICT to work from locations other than their own premises;
- a “remote” cluster based on the criteria of the spatial distribution of work: telework, working from home and home-based work. All these forms of “remote work” can be fully or partly performed at home:
- similarly to remote work, there is not an international statistical definition of telework. Nevertheless, a general definition can be taken from the 2002 EU social partners’ framework agreement on telework: *“a form of organising and / or performing work, using information technology, in the context of an employment contract / relationship, where work which could also be performed at the employer’s premises is carried out away from those premises, on a regular basis”*⁴. What is often considered specific to telework is that the work carried out remotely entails the use of personal electronic devices, such as computers, tablets or mobile phones and is often restricted to employees only⁵;
 - working from home refers to work that takes place fully or partly within the worker’s own residence. Work at home is an option of the variable “type of workplace” in the resolution concerning statistics on work relationships⁶. Working from home can be performed by both dependent and independent workers and does not necessarily entail the use of digital devices;
 - home-based work is a sub-category of “working from home” and is defined in the resolution concerning statistics on work relationships as *“workers whose main place of work is their own home”*⁷. Generally speaking, home-based workers are those who are used to carry out their work at home, regardless of whether the home is the default place of work.

All the above definitions of “remote work” are strictly interrelated and have some degree of overlap. In this paper and more generally in IRSmart project the main focus of interest is the type of remote work that has become common since the advent of the COVID-19 crisis, with employees working remotely from home, using ICT, as opposed to working from an employer’s workplace. Regardless of the specific peculiarities of each different definition, the IRSmart project adopts an inclusive defining framework of “remote work” without making any limitation in terms of spatial distribution of work, intensity of ICT use, employment status or mobility of worker. The project will take into consideration all forms of work that during the pandemic have experienced an intensification or a radical switch in working from distance or outside the default place

⁴ Vargas Llave, O., Mandl, I., Weber, T. and Wilkens, M. (2020), Telework and ICT-based mobile work: Flexible working in the digital age, New forms of employment series, Publications Office of the European Union, Luxembourg <https://www.eurofound.europa.eu/publications/report/2020/telework-and-ict-based-mobile-workflexible-working-in-the-digital-age>

⁵ Mandl, I., Curtarelli, M., Riso, S., Vargas, O. and Gerogiannis, E. (2015), New forms of employment, Publications Office of the European Union, Luxembourg

⁶ ILO. 2018. Resolution concerning statistics on work relationships, adopted by the 20th International Conference of Labour Statisticians (Geneva, 10–19 October). Available at: <https://ilostat.ilo.org/resources/methods/icls/icls-documents/#icls20>.

⁷ Ibidem

of work. The only exception is for platform workers. Although theoretically they are a form of ICT-based mobile work, platform workers are not included in our analysis for at least three reasons:

- platform workers are digital workers in which the default place of work does not coincide with any employers' premises but with the online labour market. That means that work of platform workers can not be performed alternately outside or inside the employers' premises;
- for platform workers, it is unclear whether and to what extent the command and control management is the responsibility of the client or of the digital platform (a organisation issue explored in our studies);
- on line outsourcing, actually, represents a risk of an excessive and unleashed use of "remote work" and not simply a form of it.

1.2 Regulation of remote working in the EU pre-Covid-19

As the impact on the regulation system of remote work will be addressed by the IRSmart project, it is of interest to understand how remote work has been regulated at EU level and in the different EU member states before the Covid-19 outbreak. First of all, it should be pointed out that remote work is not regulated at EU level through hard-law mechanism. No specific EU Directives are dedicated to remote working but many directives and EU regulations indirectly have some implications on it:

- As emerged in many studies⁸, duration and organisations of working time are critical aspects for who performs his work from distance. With this regard, the [EU Working Time Directive \(Directive 2003/88\)](#) includes provisions aimed at protecting the safety and health of workers (maximum of 48 working hours per week, etc.), including those performing telework;
- the [Framework Directive on Safety and Health at Work \(Council Directive 89/391/EEC\)](#) when dealing with the health and safety of workers in the workplace, does not specify the work location and, accordingly, also applies to remote workers;
- the [Transparent and Predictable Working Conditions Directive \(Directive \(EU\) 2019/1152\)](#) indirectly affects remote workers as it requires that provisions be made in relation to the place of work and that work patterns be clarified in the employment contract. Moreover, the directive seeks to protect workers from on-demand requests and this could help to reduce the unpredictability of irregular working time patterns and have a positive impact on the work-life balance of workers;
- although it does not deal with the potentially negative impact of telework⁹, the [Work-Life Balance Directive \(Directive \(EU\) 2019/1158\)](#), includes telework as one of the flexible working arrangements to which working parents and carers are entitled. Remote workers who exercise this right are protected against discrimination or any unfavourable treatment resulting from the request;
- the [General Data Protection Regulation \(Regulation \(EU\) 2016/679\)](#), replacing Directive 95/46/EC, regulates the collection, use and transfer of personal data, and establishes provisions related to data-processing operations, including employee monitoring. In this view, this regulation requires that employees' consent be given prior to the introduction of any employee monitoring system¹⁰.

⁸ Eurofound (2020), *Regulations to address work-life balance in digital flexible working arrangements*, New forms of employment series, Publications Office of the European Union, Luxembourg.

⁹ Eurofound (2020). *Regulations to address work-life balance in digital flexible working arrangements*. Publications Office of the European Union, Luxembourg.

¹⁰ Eurofound (2020). *Employee monitoring and surveillance: The challenges of digitalisation*. Publications Office of the European Union, Luxembourg.

With regard to telework, the main EU regulation was introduced through the [EU Framework Agreement on Telework](#) (2002). This is an autonomous agreement between the European social partners (ETUC, UNICE, UEAPME and CEEP) that commits the affiliated national organisations to implementing the agreement according to the ‘procedures and practices’ specific to each Member State, and not incorporated into EU Directives, and so it is not legally binding. The framework agreement requires that telework be voluntary for both side and that teleworkers have the same active and passive collective rights as workers at the employer’s premises.

Finally, in 2021 the [European Parliament](#) approved by a large majority the proposal for a European Directive aimed at recognising the right to disconnect as a “fundamental right”. In addition, the law should also establish minimum requirements for telework and provide clarity on working conditions, working hours and rest periods. Lastly, the amendment asking for a three-year postponement of the start of the legislative process was also passed, in order to leave room for the social partners to implement the autonomous agreement signed in 2020: the European cross-sector social partners (CES – BusinessEurope – CEEP – SME) signed the [European Framework Agreement on Digitization](#), an agreement that also regulates the modalities of connection and disconnection and that must be implemented by an Interconfederal Agreement with the employers’ associations.

1.3 National regulations in a comparative perspective

In a comparative perspective among EU countries, remote work, before the advent of Covid-19 outbreak, was regulated either through legislation or by collective bargaining or by both types of regulation depending on historically and traditionally constituted configurations of national institutions¹¹. Accordingly, those countries with strong traditions of voluntarist regulation (such as EU Nordic countries) have mainly addressed telework through collective bargaining, whereas statutory legislation has been more prominent in ‘state-centred’ industrial relations models (France, Portugal, etc.).

Considering the role played by statutory regulation on telework, two groups of countries can be identified:

- **those countries with statutory definitions and specific legislation on the use of telework** (in terms of working condition and employment conditions) established in the labour code or other forms of legislation. This group is made up of Belgium, Bulgaria, Czechia, Spain, Germany, Estonia, France, Greece, Hungary, Croatia, Italy, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia and Slovakia;
- **those countries without statutory definitions and specific legislation on telework** or where remote work is addressed indirectly in different laws dealing with data protection, health and safety, working time, work-life balance. This group consists of Austria, Cyprus, Denmark, Finland, Ireland, Latvia and Sweden.

In **countries with a specific legislation on remote working**, telework is conceived as a work arrangement rather than a labour contract and is limited only to dependent employment relationships. In part of these countries (Bulgaria, Hungary, Luxembourg and Slovenia), terms and procedures have to be established in a collective or individual employment contract and in some other countries (Estonia, Spain, France, Greece, Croatia, Italy, Malta, Portugal) the legislation requires only a written agreement. As regards ICT use, in some

¹¹ Hall, P. A. and Soskice, D. (2001). ‘An introduction to varieties of capitalism’. In P. A. Hall and D. Soskice (eds), *Varieties of Capitalism*, Oxford University Press, Oxford, pp. 1-68

countries telework is understood only for jobs where mobility is ICT-enabled (Belgium, Bulgaria, Czechia, Spain, France, Malta), while in other countries (Czechia, Croatia, Spain, Italy, the Netherlands) legislation does not make explicit references to ICT use or ICT use is not necessary. In terms of frequency, in some of these countries the definition of “telework” only includes those forms of work arrangements that are carried out on a regular basis (Germany, Spain, Hungary, Lithuania, Luxembourg, Malta, Poland, Romania), whilst in others of these countries legislation makes a distinction among regular and not-regular teleworkers. With regard to new employment rights for teleworkers, a particular attention should be drawn to those four countries that have introduced the right to disconnect, namely Belgium, Italy, Spain and especially France that was the first European country to legislate the right to disconnect in the Labour Code in 2016.

In countries with a specific legislation on the use of telework, the degree of intervention of collective bargaining in the regulation of telework issues is strictly dependent on the different collective bargaining coverage and the centralised/decentralised collective bargaining structure. In countries such as Spain and Portugal, very few collective agreements deal with telework. Collective bargaining has played a more prominent role in the regulation of telework in Germany, France or Italy. In Germany, telework regulation at company level has a longstanding tradition tracing back to the 1990s and it is worth mentioning the first pioneering agreement concluded in 2011 in Volkswagen that prevented emails from being sent to staff mobile phones between 18.00 and 7.00. In France, 25% of employees were covered in 2017 by a collective telework agreement concluded at company level that established more provisions for the protection of employees¹², while in Italy, about 30 % of the national collective bargaining agreements contain clauses on telework and/or smart working¹³.

In the **countries without statutory definitions of remote working or specific legislation on telework** before the pandemic, telework issues were dealt with different and alternative legislations. Especially in EU Nordic countries (eg. Denmark in which there are “Guidelines for telework or home-based work” under the Working Environment Act), telework is addressed by the frameworks of national Occupational Safety and Health (OHS) regulation. With this regard, the Austrian case it is worth mentioning as in some companies works councils have bargaining for specific OSH standards for teleworkers. In some other countries, telework issues have been addressed through data protection legislation (eg. Austria with the [Data Protection Act 201816](#) within the Labour Constitution Act) or national legislation on working time (eg. Finland in which the Working Hours Act introduces a concept of working time that is not longer tied to a workplace). In the lack of a specific legislation on telework, collective bargaining plays a relevant role in these countries. With this regard, two groups are identifiable. A first group (Cyprus, Latvia and Ireland) in which telework is mainly regulated through individual negotiations and the EU Framework Agreement on telework has not been implemented or only formally implemented by tripartite or bipartite agreements¹⁴. In the second group of countries (Austria, Denmark, Finland and Sweden), the EU Framework Agreement has been implemented and applied in most of the industry-wide collective agreements and telework is extensively regulated in sectoral and company collective agreements. Nevertheless, in the EU Nordic countries occasional telework, that represents a considerable part of it¹⁵, is mainly regulated by individual and informal agreements in line with

¹² DARES (2019). ‘[Quels sont les salariés concernés par le télétravail?](#)’ DARES Analyses, November 2019. No 051.

¹³ Cetrulo, A. (2021). [Early adoptions of remote work in Italian collective bargaining agreements: from flexible working time to the risk of surveillance and unpaid overtime. Lessons for the postCovid agenda](#)

¹⁴ Eurofound (2010). Telework in the European Union, Publications Office of the European Union, Luxembourg.

¹⁵ Sostero M., Milasi S., Hurley J., Fernández-Macías E., Bisello M., Teleworkability and the COVID-19 crisis: a new digital divide?, Seville: European Commission, 2020, JRC121193

a cultural tendency that sees telework as a work arrangement largely self-regulated based on trust between employees and employers¹⁶.

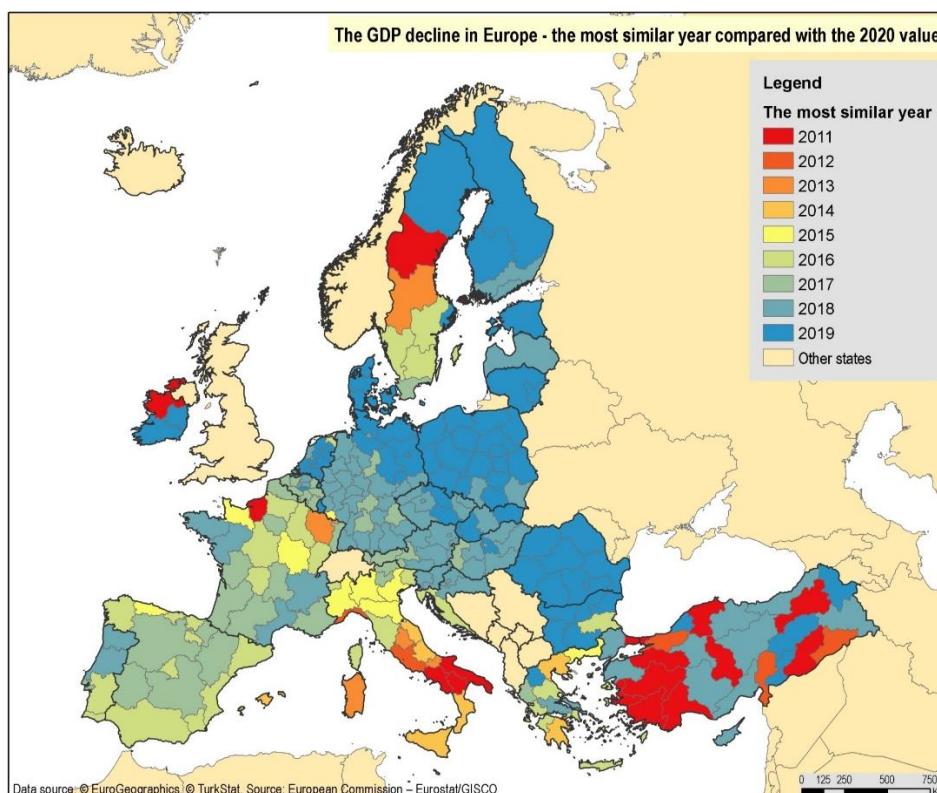
1.4 Remote working in the EU, before and after Covid-19 pandemic

After the illustration of the conceptual scope of our analysis in the previous chapters we present here how remote work has changed because of Covid-19 pandemic. As addressed in the previous section, the scope of the analysis includes all the possible forms of remote work, with particular attention towards the type of remote working that outspread after Covid-19 pandemic, that is home working by means of ICT. However, despite the growing interest both in the research and policy arena on remote working, accurate and comprehensive data in some countries are rare or only relate to people working from home.

In this chapter we present the evolution of remote working across European countries by means of the available data, acknowledging that they describe only part of the overall picture, although the most important in the light of the focus of IRSmart project.

Before doing this it is worth recalling the impact of Covid-19 on European regions, expressed in economic terms (GDP decline). In 2020 the pandemic impacted the European regions in a differentiated manner, as the following graph shows. Some regions, in particular in Eastern Countries saw their level of GDP being almost the same as the 2019 level while some others, especially in Southern and Western regions of Italy, France and Spain, went back to 2014 and 2015, even to 2011.

Figure 1 – GDP decline in Europe – the most similar year compared to the 2020 value



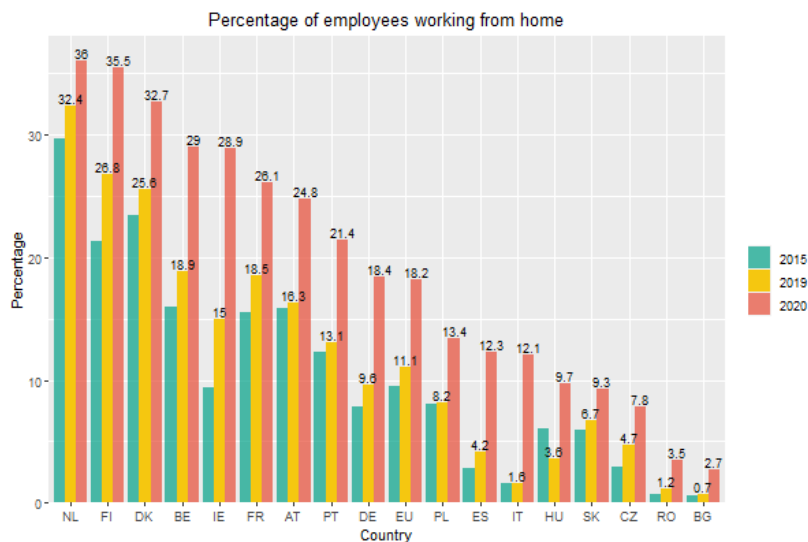
¹⁶ Sanz de Miguel, P. (2020) [Exploring the contribution of social dialogue and collective bargaining in the promotion of decent and productive virtual work](#). Deep View Final Report, VP/2017/004/0050

The following graphs instead show the percentage of dependent employees and self-employed working from home sometimes or usually in a number of selected European countries in 2015, 2019 and 2020.

In 2015 the average percentage of employees (Fig. 1) working from home in the EU-27 was just below 10%, increased slightly to 12% in 2019 and jumped to 18% in 2020. The effects of the Covid-19 pandemic on the growth of the percentage of people working from home is thus very clear as it increased by 6 percentage points in one year only. Beyond the average data, the differences across European countries are relevant: some countries reported much higher rates of employees working from home already in 2015, such as the Netherlands, Denmark, Finland, Belgium, France (between 16% and 30%) while Italy, Romania and Bulgaria reported quotas of employees working from home almost close to zero. Even if all the analysed countries experienced a jump between 2019 and 2020, for some of them such as Italy, Spain and Ireland the growth has been greater. It is also interesting to note that for some of the examined countries, such as Romania and Bulgaria, experienced a very little growth in the percentage of employees working from home, even if this quota was very small before the pandemic, in other words in these two countries the pandemic had no significant impact on the number of people working from home.

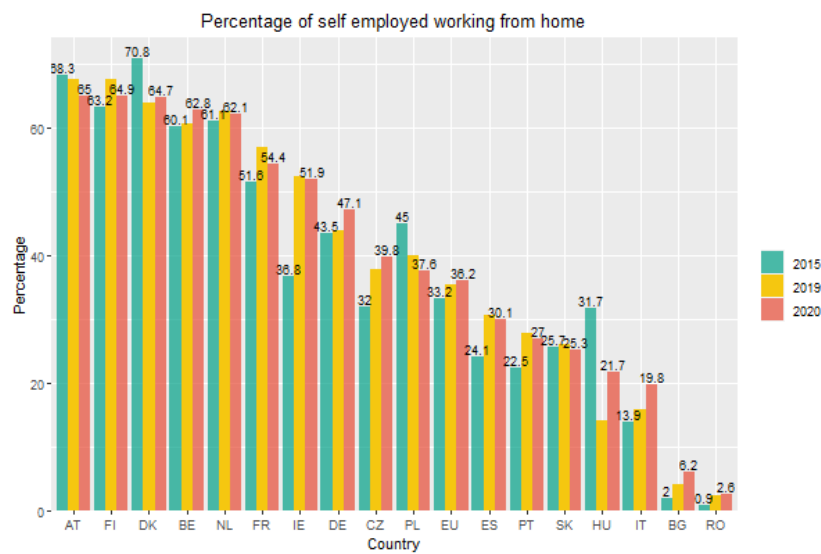
The picture changes if we look at self-employed workers (Fig.2), and it is not surprising to see that the average percentage of self-employed working from home in the EU-27 was above 30% already in 2015, with this share remaining stable in the following years. However, also among these workers there are relevant differences across European countries. In Austria, Finland, Denmark, Belgium the percentage of self-employed working from home was higher than 60% already in 2015 while in Bulgaria and Romania was much lower, close to zero.

Figure 2 Percentage of employees working from home (Sometimes+Usually), selected European countries, 2015, 2019, 2020



Source: own elaborations on Eurostat data

Figure 3 Percentage of self-employed working from home (Sometimes+Usually), selected European countries, 2015, 2019, 2020

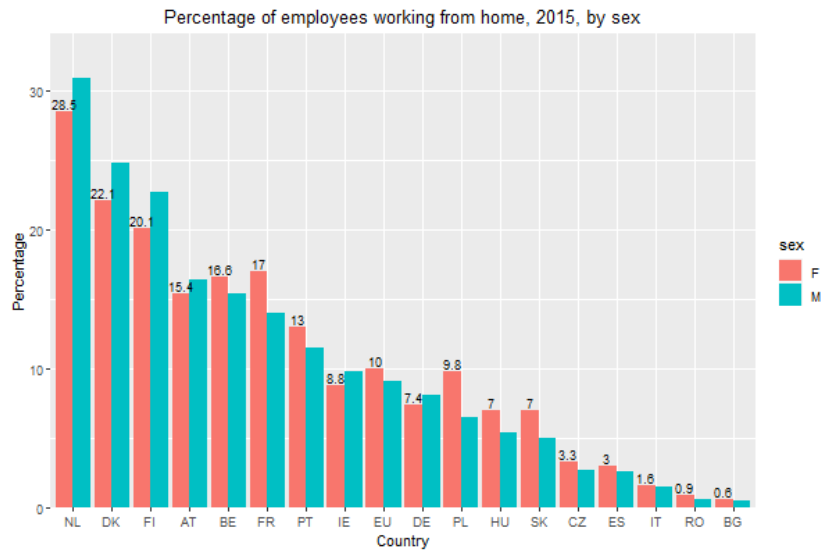


Source: own elaborations on Eurostat data

From this initial statistical overview, the likelihood of working from home before the pandemic looks to be influenced by some cultural or normative Country-specific aspects as those countries that reported higher percentages of employees working from home in 2015 are the same that showed higher percentages of self-employed working from home in the same year. According to their normative status, self-employed workers should be much more free than dependent workers to choose their place of work, thus in theory we shouldn't expect that the percentage employees and self-employed working from home are positively correlated as instead they look to be. As the major changes in terms of people starting to work from home with the pandemic were experienced among employees rather than among self-employed, we focus on the first ones, providing further analysis which take into consideration in particular the variables of gender and age.

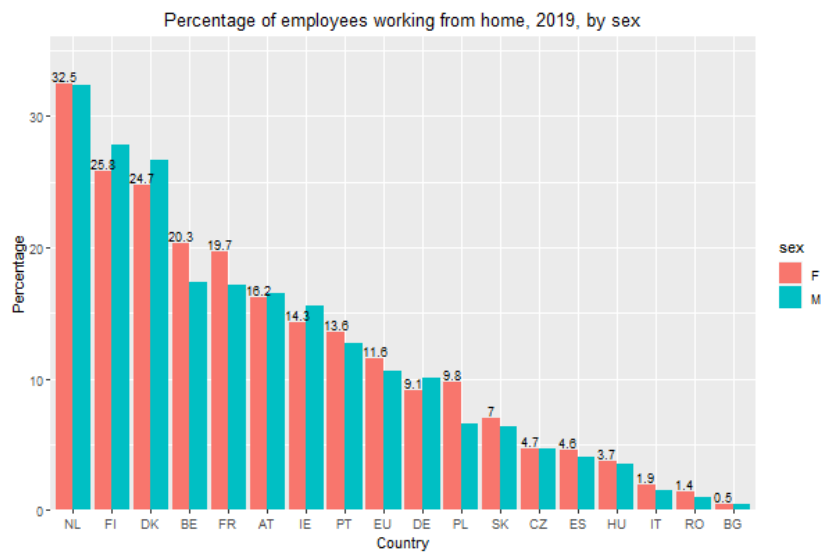
Before the pandemic, both in 2015 and in 2019 (Fig. 3 and Fig. 4), in the EU-27 on average the percentages of male employees and female employees working sometimes or usually from home were almost the same, approximately 10% even if relevant differences can be found across countries. During that period, we can see important differences with regard to gender in countries where working from home was more widespread. For example, the share of men working from home was higher than the one of women in a number of Nordic countries, like Netherlands, Finland and Denmark. Differently, in Belgium, Portugal, France we see an opposite picture. In those countries with a limited diffusion of homeworking, before Covid-19 pandemic working from home looked to be slightly more diffused among women than men, like in the case of Poland, Spain, Hungary, Italy and Romania.

Figure 4 Percentage of male and female employees working from home (Sometimes+Usually), selected European countries, 2015



Source: own elaborations on Eurostat data

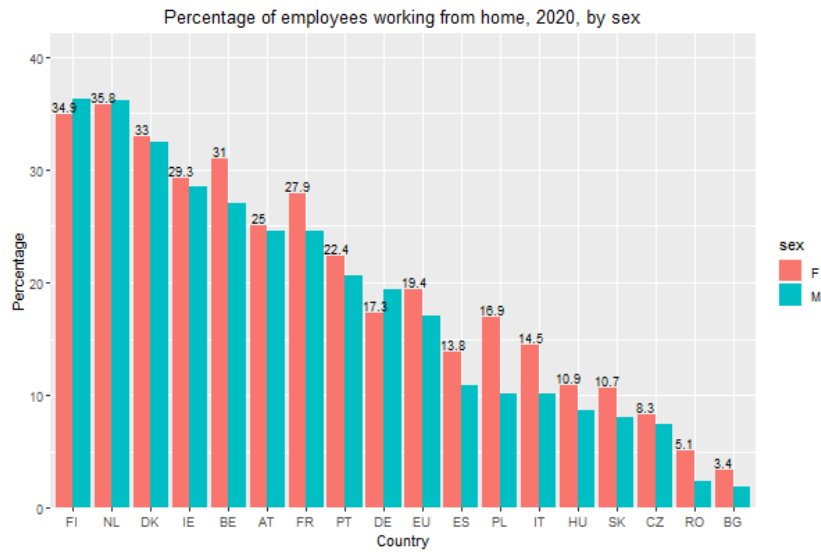
Figure 5 Percentage of male and female employees working from home (Sometimes+Usually), selected European countries, 2019



Source: own elaborations on Eurostat data

Between 2019 and 2020 (Fig. 5), the average percentage at EU-27 level of women employees that worked from home sometimes or usually jumped from 12% to 19%, while among men from 10% to 17%, again with some relevant differences between countries. In some countries like Portugal, Belgium and France the growth in the percentage of employees working from home has been almost the same for men and women, without significant differences, whereas in Finland, Denmark, Poland, Italy and Spain the percentage of women working for home grew much more rapidly, leading the first two countries to reach equal proportions of men and women working from home and the last three to have significant more women than men working from home, in relative terms.

Figure 6 Percentage of male and female employees working from home (Sometimes+Usually), selected European countries, 2020

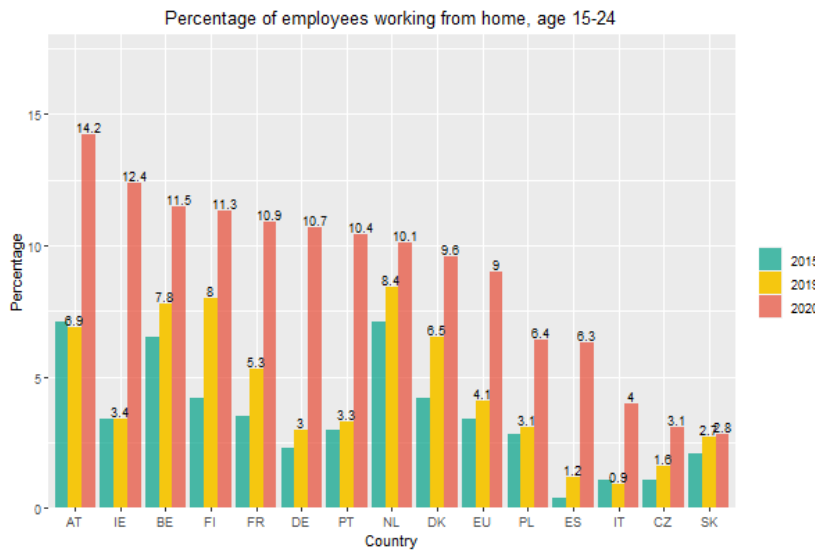


Source: own elaborations on Eurostat data

With the Covid-19 pandemic all employees of different age groups experienced a growth in the rate of people homeworking, although with some relevant differences across age groups and countries. In 2019 (Fig. 7) the youngest employees (age 15-24) at the EU level were those experiencing the lowest diffusion of people working from home (4,1%), while in the other age groups this rate was between 11% and 12%. However, in those countries where homeworking was in general more diffused before the pandemic, also the rate of young employees homeworking was higher, as in the case of Netherlands, Finland, Belgium, Denmark and Austria. If we look instead to countries where working from home for the youngest was quite uncommon, we find significant differences in the growth experienced in 2020.

While in Ireland, Germany, Portugal the rate of young employees working from home jumped by approximately 7-10 percentage points, in other countries like Italy and Czech Republic the growth was much smaller.

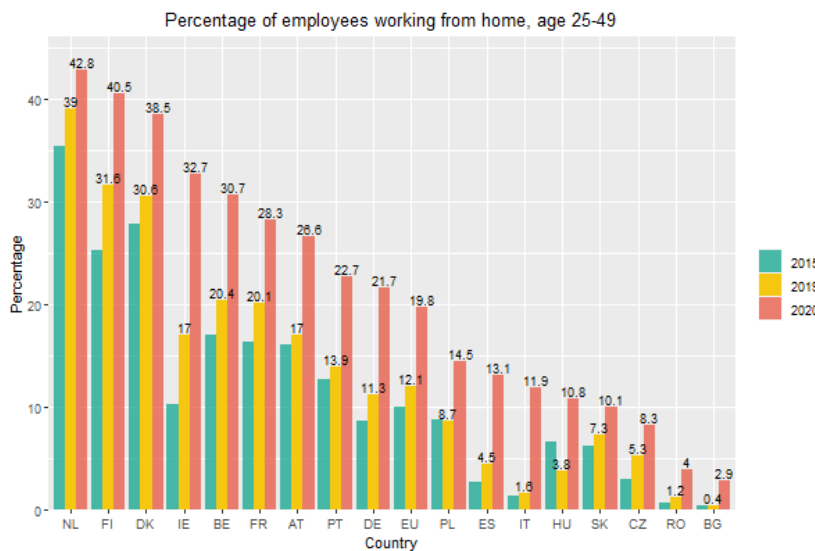
Figure 7 Percentage of employees working from home (Sometimes+Usually) by age, selected European countries, 2015



Source: own elaborations on Eurostat data

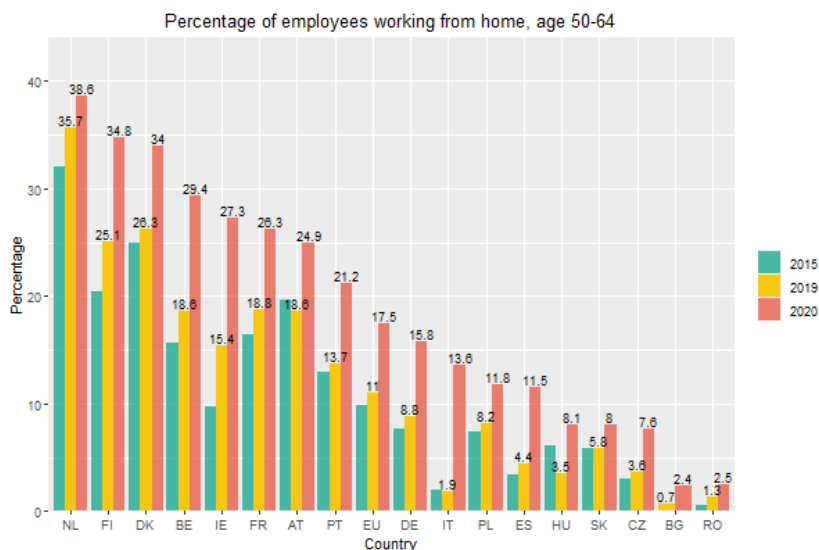
The diffusion of homeworking in 2019 was higher among elder workers and also the growth in 2020 (Fig.7 and Fig. 8) was bigger as compared to 15-24 years employees. With the only exception of Netherlands, where the rate of people working from home was the highest before the pandemic, and of Czech Republic, Romania and Bulgaria where instead the rate was the lowest, in all the other countries the growth of people working from home jumped significantly, on average by 8-10 percentage points in most of the Countries both in the age groups 25-49 and 50-64. Finally, it is interesting to underline the case of Ireland, the Country that experienced the absolute highest increase in the percentage of employees working from home for all the three age groups analysed.

Figure 8 Percentage of employees working from home (Sometimes+Usually) by age, selected European countries, 2019



Source: own elaborations on Eurostat data

Figure 9 Percentage of employees working from home (Sometimes+Usually) by age, selected European countries, 2020



Source: own elaborations on Eurostat data

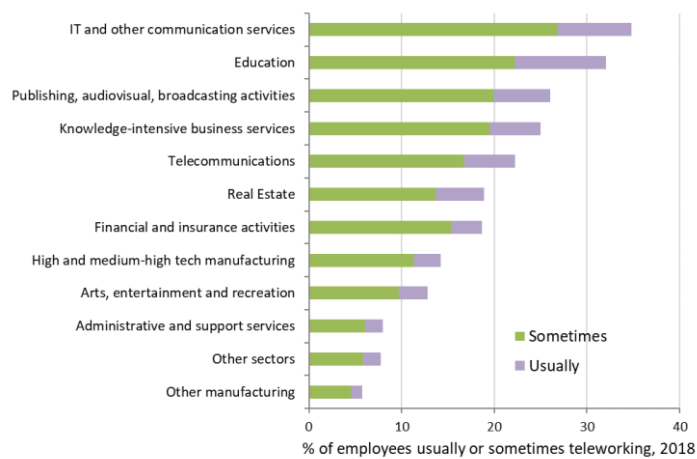
There are of course several factors that influenced the diffusion of remote working both before and after Covid-19 outbreak. The industrial structure and characteristics of local labour markets play a relevant role. The paper on Teleworkability by Eurofound (2020)¹⁷ analyses data on the widespread of teleworking before and after Covid-19 pandemic. As stated in the paper (p. 6) and recalled in the previous chapter, “telework can be considered as a subcategory of the broader concept of remote work. Although there is no internationally recognized definition, what is often considered specific to telework is that the work carried out remotely entails the use of personal electronic devices, such as computers, tablets or mobile phones. Moreover, the concept of telework is often restricted to employees only [...]. In line with this definition, the 2002 EU social partners’ framework agreement on telework defined telework as ‘a form of organising and / or performing work, using information technology, in the context of an employment contract / relationship, where work which could also be performed at the employer’s premises is carried out away from those premises, on a regular basis’[...]”.

Before the pandemic, teleworking was more diffused in a small number of sectors. In IT and other communications services, Education, Publishing, audiovisual, broadcasting activities, Knowledge-intensive business services¹⁸ and Telecommunications the percentage of total employment (including dependent and self-employed) teleworking was higher than 20% out of the total, approaching 35% in IT and communication services. Among these sectors it might look surprising that in education the rate of people doing teleworking is among the highest as Education is traditionally place-dependent being linked to specific locations such as schools and colleges. However, it should be recalled that usually teachers work remotely, out of classes, to prepare lessons and correct homework.

¹⁷ Op. cit.

¹⁸ The group “Knowledge-intensive business services” includes the following sectors: Legal and Accounting Activities - Activities of Head Offices; Management Consultancy Activities - Architectural and Engineering Activities; Technical Testing and Analysis - Scientific Research and Development - Advertising and Market Research - Other Professional, Scientific and Technical Activities. The group IC and other communication services include: Computer Programming, Consultancy and Related Activities - Information Service Activities.

Figure 10 Percentage of employed people teleworking Sometimes and Usually by sector, Eu-27, 2018

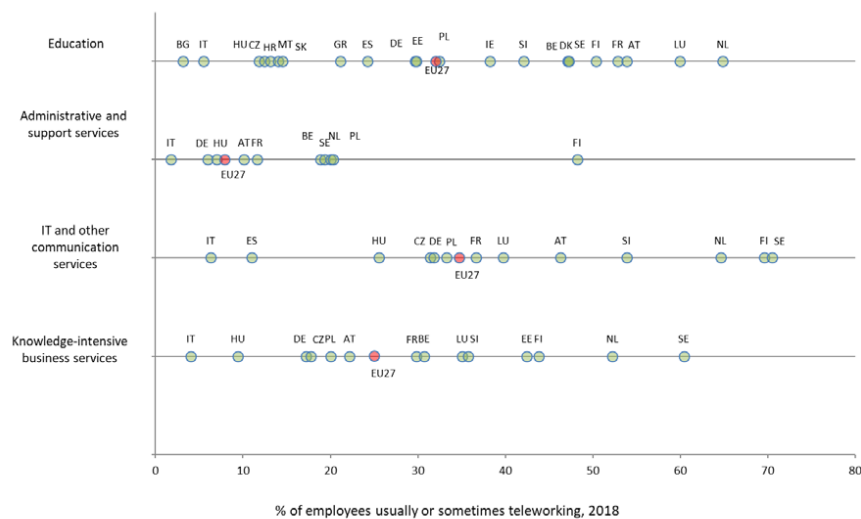


Source: Eurofound (2020)

The following graph confirms that before the pandemic in some countries teleworking was not a common practice, even in those sectors where in general terms it was more diffused. For example, in Italy, Spain, Hungary and Czech Republic which were among the countries with the lowest percentages of teleworkers before the pandemic, reported the lowest levels of teleworking also in IT and other communication services and similarly occurs in Education, and Knowledge-intensive business services. This picture confirms in our view that, even if there are factors that influence the likelihood of teleworking, as we will better illustrate later on, in some countries this way of working was not a concrete option regardless of sectors, occupation and profile on the labour market.

However, according to Eurofound (2020, p.10) “differences in industrial structures is one of the main factors explaining varying prevalence of telework across EU countries. Countries such as Sweden, Finland, and the Netherlands, where workers in knowledge- and ICT-intensive service sectors account for a larger share of total employment” were those where telework was more widespread already before Covid-19 pandemic.

Figure 11 Percentage of employed people teleworking (Sometimes+Usually) by sector, UE-27 countries, 2018

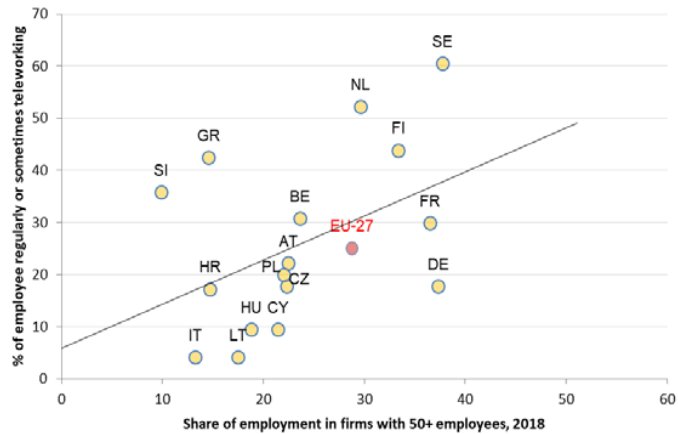


Source: Eurofound (2020)

Also firms size looks to influence the degree of teleworkability as this tends to be higher in larger firms. The smaller average size of companies in some countries such as Italy and Hungary could be one important factor

explaining the lower diffusion of teleworking. However is also interesting to note that there are some countries characterized by smaller average size of companies like Greece and Slovenia that show relatively high percentages of employees teleworking. From this graph, Germany looks to quite peculiar as despite the presence of large companies the share of employees working sometimes or usually from home is lower than in the majority of other EU countries.

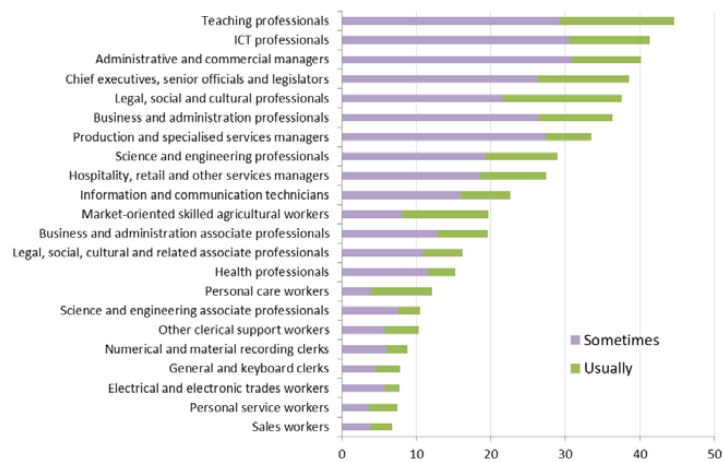
Figure 12 Percentage of employees teleworking (Sometimes+Usually) and share of employment in firms with 50 + employees, UE-27 Countries, 2018



Source: Eurofound (2020)

Together with sectors also occupations experienced a significant heterogeneity in the likelihood and frequency of teleworking. Before the Covid-19 outbreak, teleworking was more common in high-skilled, white-collar occupations, such as managers and professionals. This is shown in the following graph that pictures how the highest prevalence of telework before the pandemic was found among teachers (43%), ICT professionals (41%), followed by managers and professionals working in legal, business, administration, and science. As stated earlier in the chapter, high rates of homeworking among some professionals reflect the performance of informal overtime work, such as correcting homework for teachers but also checking emails and reading specialised literature, at home.

Figure 13 Percentage of employed people teleworking Sometimes and Usually by sector, Eu-27, 2018



Source: Eurofound (2020)

On the top of the differences across sectors and occupations, there are differences across the different contractual conditions of worker in doing telework. According to Eurofound (2020, p.7) referred to pre-pandemic period “working from home occasionally is twice as likely amongst permanent – as opposed to temporary – employees, and more likely among full-timers – as opposed to part-timers. By contrast, employees who usually work from home are just as likely to be temporary as permanent and more, not less, likely to be part-timers than full-timers.”

1.5 Degree of Teleworkability

The sudden growth in remote working illustrated so far raised the question of how many jobs can be properly carried out remotely. The answer to this question provides important reference information to understand whether the labour force in remote working during the Covid-19 outbreak has exceeded the teleworkability threshold and the pre-Covid-19 gap between jobs potentially teleworkable and jobs effectively performed remotely on a regular basis. Different studies have been carried out on the impact on labour market of the confinement measures and on the calculation of which jobs can be performed remotely¹⁹, in this paper we refer to the concept of teleworkability elaborated by a joint European Commission–Eurofound Report named “[Teleworkability and the COVID-19 crisis: a new digital divide?](#)”²⁰.

Observing the teleworkability of the labour force in EU27 before the advent of Covid-19 some structural evidences emerge:

- in general, the share of employment that is potentially teleworkable is about 37% in EU ranging from 27% in Romania to 54% in Luxembourg;
- a higher share of female employment (45% against 30% for male employment) is teleworkable and in general, teleworkable employment tends to be more common among native-born workers, open-ended contracts and for who works in large companies and in cities (compared to suburbs and rural areas);
- among all EU27, the potential teleworkable employment (37%) is much higher than effective share of pre-outbreak employment working remotely (about 15%, depending on the source of the statistics);

¹⁹ Fana, M., Tolan, S., Torrejón, S., Urzi Brancati, C., Fernández-Macías, E, The COVID confinement measures and EU labour markets, EUR 30190 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-79-18812-4 doi:10.2760/079230, JRC120578

²⁰ Sostero M., Milasi S., Hurley J., Fernández-Macías E., Bisello M., Teleworkability and the COVID-19 crisis: a new digital divide?, Seville: European Commission, 2020, JRC121193. In this paper, the concept the teleworkability is defined as “the technical possibility of providing labour input remotely into a given economic process”. To construct the teleworkability indicators of physical and social interaction, the Joint Report relied on existing European data sources that measure the task content of specific occupations and in particular two databases are used: the Italian Indagine Campionaria delle Professioni, and the European Working Conditions Survey. Following the framework and taxonomy of tasks for occupational analysis developed in Fernández-Macías and Bisello (Fernández-Macías, E., Klenert, D., Antón, J. (2020). Not so disruptive yet? Characteristics, distribution and determinants of robots in Europe. JRC Working Papers on Labour, Education and Technology, No. 2020/01. Seville: Joint Research Centre, European Commission.), and considering the current state of technology, the Joint Report argues that the crucial determinant of whether a certain job can be done remotely or not is the relative importance of physical tasks – those involving physical interaction with objects or people.

- the gap between potential and actual teleworking is greater among dependent employees (37% of teleworkable workers against about 10% of actual teleworkers according to the Labour Force Survey 2018 EU27) than self-employed (32% against 34%);
- among white-collars the share of teleworkable employment is much higher than blue-collars for which physical requirements of the jobs and associated place-dependence render most professional categories non teleworkable; the share of potential teleworkable among white-collars ranges from 85% of “clerical support workers” to about 28% of “service and sales workers” while among blue-collars (“craft and related trades workers”, “plant and machine operators” and “elementary occupations”) is less than 2%;
- The teleworkable employment shares are higher among service sectors in which white-collar employees are prevalent. Nearly all financial-services employment is teleworkable (93%) as well as ICT services (79%). Service sectors with lower shares of teleworkable employment are health (30%), retail (27%) and accommodation/food services (16%). The primary sector, manufacturing and construction sector all have low shares of teleworkable employment (10-20%);
- Among the determinants of teleworkability, the wage and the education level of workers play a crucial role. The higher is the wage and the level of education, the larger is the share of potential teleworkable employment: 74% of those jobs in the highest-paying quintile is teleworkable and only 3% of those jobs in the lowest quintile.

1.6 Effects and desirability of remote working

The massive diffusion of teleworking because of Covid-19 outbreak allowed a large number of companies and workers across the EU to experience it for the first time and thus to recognise both positive and negative aspects. However, to better evaluate the effects of the shift to telework on workers and businesses immediate impression and effects recorded in 2020 should be differentiated from those experienced later in 2021 and afterwards. At the moment, this differentiation can be only partially done as the studies on 2021 are only a few.

Table 1 – Positive and negative effects from teleworking, before, in and after pandemic

	At the beginning of pandemic only	Before, in and after pandemic
Positive effects	Employment continuity	Higher quality of work as perceived by workers
		Flexible work schedule
		Higher degree of autonomy
		Higher individual performance, innovative behaviours and productivity
		Better work-life balance
Negative effects-potential risks		Reducing time and stress due to commuting
		Blurred boundaries between work and home life, with higher risks for female workers
		Tendency to work longer hours
		Risks of higher work-intensity
		Risks of isolation
	Risks of not paying sufficient attention to ergonomics and longer time spent on visual display	
	Risks of pervasive remote control by supervisors	

Source: own elaboration

Looking at the immediate effects, according to Eurofound (2020) working from home facilitated employment continuity in a context of widespread workplace closures and in countries where more employees began working from home as a result of the pandemic, a smaller share reported temporary or permanent job loss, or experienced a cut in their working time.

In the same report, the data from the Living, Working and Covid-19 survey show that blurred boundaries between work and home life are one potential negative effect of working from home. This downside of homeworking was certainly experienced at beginning of the pandemic, but it was already acknowledged before, as it will be addressed later. According to the survey, “nearly a half of those teleworking (48%) reported in April 2020 working in their free time to meet work demands regularly (at least once or twice a week), over twice the share of those not teleworking (23%). This already marked differential increased in the second round of the survey in June/July 2020 (47% v 17%). At the same time, employees working from home during the pandemic were much more likely to have put in longer unpaid domestic work hours (caring and household work) than those not working at home notably for those with school-age children. School closures appear the most plausible factor influencing these patterns these differentials.”²¹

However, the second round of the survey, conducted between June and July 2020, showed that overall the experience of working from home during the Covid-19 crisis was positive for the majority of employees who did so. In particular, people were satisfied with the quality of their work (77%⁹), with the amount of work performed (69%) and with the overall experience (70%). Considering these results, it is not surprising to read in the survey data that the large majority (78%) of “pandemic” teleworkers would like to work from home at least from time to time after Covid-19 restrictions. However, the possibility to continue to work at the workplace and thus mixing teleworking and working at the workplace is relevant as only 13% say that they would like to work only remotely.

Among the factors that influence the preferences towards teleworking there is the personal experiences in doing it. Employees working from home were much more likely to indicate wanting to telework after the pandemic and the longer was the period they teleworked, the higher was the ambition of continuing to do so. At the same time, approximately half (45%) of those who never teleworked in Covid-19 crisis say that they would never work from home.

A research report by Eurofound and ILO published before the pandemic²² reviewed the existing literature at that time on the characteristics of teleworking, considering both home working and ICT based working. The studies collected and analysed allow to better understand the positive and negative effects of teleworking, thus impacting on the desirability to telework. Overall the studies tackle the following four issues:

- Working Time, including working hours and working time organisation,
- Individual and organisational performance,
- Work-life balance,
- Occupational Health and well-being.

With regard to first issue, the working hours of teleworkers tend to be longer than for those employees who always work at the employer’s premises. Teleworkers are also more likely to work in the evenings and on weekends than workers who always work in the office, although they are less likely to work at night. Teleworking looks also to have an impact on the organisation of working time: “The spatial flexibility of

²¹ Eurofound 2020, p.22, Op.Cit.

²² Eurofound and ILO, 2017, Op.Cit.

performing work-related tasks irrespective of location allows for an alteration of regular work schedules, including performing work outside of regular business hours”²³. Finally, in those countries where the information is available, teleworking is associated with employee-oriented time flexibility, that is a certain degree of autonomy in choosing how to organise and perform their work.

With regard to individual performance, working time flexibility, the ability to better concentrate and the lack of interruption led to higher individual performance and fostered innovative behaviours and productivity. These positive results may encounter a number of barriers, in particular in those cases where the use of ICT is problematic for teleworkers and in organisations where there is a high level of control over workers’ performance.

Work-life balance is improved by teleworking, mainly because of the reduction in commuting time and autonomy to organise working schedule. However, this positive characteristic has also some risks as there might be a certain degree of work-home interference that impedes to distinguish between the two, a risk that is higher for women. As there is a degree of ambiguity in the results on the relation between work-life balance and teleworking, researchers started to analyse how and not if telework might improve work-life balance, a key element look to be and optimal individual strategy for “work-life management” or “boundary-management”.

Finally, the area “occupational health and well-being” show a number of potential negative effects and risks. The studies analysed in the Eurofound-ILO report (2017) point out that teleworking can lead to an increase of work-intensity, risks of not paying sufficient attention to ergonomics and to the longer time spent on visual display and risks of experiencing social isolation.

Both the positive and negative effects of teleworking that were acknowledged before the pandemic could be experienced also in the pandemic, even if the availability of data on the pandemic period is very limited at the moment. The wave of the survey “living, working and Covid-19” conducted by Eurofound in April 2021 confirmed difficulties in setting boundaries between work and home life, especially in a period where schools and in general care services were at least partially closed and a fall in mental well-being due to social isolation.

The work conducted by Fana and colleagues (2021)²⁴ suggests that teleworking conducted after the pandemic outbreak on its own does not affect tasks content (what people do) but mostly how they perform their tasks (how people do what they do). The study also contributed to the argument that a need for direct control which is not feasible outside the firms’ premises tends to mutate into new forms of remote control, which can be in the long run equally pervasive. However, workers’ autonomy and the possibility to resist mechanisms of close remote control were strongly related to the levels of autonomy enjoyed prior to the shift to remote work. In terms of mental well-being and subjective perceptions, mid and low-skilled workers, and more generally those working in close contact with clients often felt more satisfied working from home than in the regular office. However, in general the study shows a negative impact on social relationships. Finally, with respect to the effects of telework during the COVID-19 crisis on work-life balance, they were strongly conditioned by the household composition. As it could be expected, workers with children, especially in school age, appear to be less satisfied with the new work arrangement.

²³ Eurofound and ILO, 2017, p.23, Op.Cit.

²⁴ Fana M., Milasi S., Napierala J., Fernández-Macías E. and Vázquez I.G. (2020), “Telework, work organization and job quality during the Covid-19 crisis, a qualitative study”, JRC Working Papers Series on Labour, Education and Technology No. 2020/11, <https://www.econstor.eu/bitstream/10419/231343/1/jrc-wplet202011.pdf>

1.7 Concluding remarks

The Covid-19 outbreak changed significantly working and living conditions across the EU. One of the most significant and sudden changes was the shift towards teleworking for a large number of workers and companies. As we have seen in the paper, teleworking was already quite diffused in a small number of European countries, while for most of them it was experienced massively in 2020 for the first time.

Several characteristics of teleworking, positive and negative, were already known before the pandemic and they have substantially be confirmed by the massive shift occurred after the pandemic outbreak. As we saw in the paper, no specific EU Directives were dedicated to remote working before Covid-19 even if many directives and EU regulations had indirect implications on it.

At the same time, we saw that in some countries was already in place a specific legislation on telework or, if not, remote work was addressed indirectly in different laws. In most of the EU countries thus, the massive shift towards teleworking occurred in a context where there was at list a partial knowledge of it and/or related legislation. However, the jump in the adoption of teleworking experienced in most of the countries, especially those where it was not very diffused before the pandemic, opened up to new forms of work organisations and pushed public authorities and companies to specifically deal with it and beginning to include it as “business-as-usual way” of working.

In this context, it is necessary to deepen the knowledge of the characteristics and effects of teleworking in order to avoid and control the key negative effects while benefiting of the positive ones. In particular, it should be better addressed the implications for workers but also for the more general living conditions.

2. Remote working across the EU - a comparison between five member States: France, Italy, Poland, Romania, Spain

Introduction

In the current section we provide a comparative overview between the five analysed Countries: France, Italy, Poland, Romania and Spain with regard to the massive adoption of remote working after the Covid-19 pandemic outbreak and the relative regulative changes. We will first provide a summary of the national reports produced for each Country that examined in depth the changes occurred at the single Country level²⁵. Later we will provide a comparative analysis related to how remote working widespread after Covid-19, the most relevant aspects and effects that were experienced at the Country level and how the regulative framework has changed and how the key problems were tackled by means of the law or industrial relations practices.

2.1 Remote working in the five selected countries – a summary

France

Definitions and regulations of out-of-office work

As such, out-of-office work does not refer to a legal definition in France. The notion of out-of-office work indeed covers different forms of remote work, outside of an employer premises. In those situations, this is the notion of telework that has been chosen for long as the right one to take into account the possibility provided to employees by new technologies to work remotely, from home or elsewhere but the employer premises. In the French context, telework regulation therefore constitutes the main regulation covering out-of-office work, considering the possibilities to carry out work alternately in and out of the employer premises. In the private sector, telework was introduced in French regulation following the impetus given by the European framework agreement of 2002. Social partners played a key role in this respect as a cross-sectoral binding agreement (2005) first regulated telework, before being partly transcribed into the Labour Code (2012 law). The reform of the Labour Code passed on 2017 amended the legal regulation in force in order to make the use of telework more flexible while securing it. The regulation in force also gives to social dialogue at local level a key role in defining the concrete implementation of telework in each company. The general orientation of this legal evolution is thus to support the development of telework. In the public sector (civil service), the regulation of telework dates back to 2016. A decree n° 2016-151 of 11th February 2016 plans a specific regulation. This decree was adopted in application of law n°2012-347 of 12th March 2012 and was amended on 5th May 2020, after the raise of the COVID crisis. The definition of telework in the public sector is today the same than in the private one.

In this context, teleworkers are employees and thus benefit from all the provisions of the Labour code whatever the various forms of their work organisation. Regarding the latter, one often distinguished, well before the COVID crisis, different ways to telework, especially:

²⁵ Available at <https://www.irsmart.eu/>

- home-based telework that concerns the employee who works most of the time at home and occasionally goes to the employer's premises;
- the nomadic teleworker who keeps a physical workstation in the company but uses ICTs when travelling, at home or at the customer's premises to connect to the company's information system
- telework in telecentres - whether public or reserved for a single company – that allows a clear distinction between private and professional life, and maintains contacts between employees;
- the networked teleworker who can be located in a site - the company's, in a telecentre or at the client's premises - and work under the control of a remote manager, possibly within a "virtual team".

Diffusion of out-of-office work before and after the COVID-19 pandemic

In the French context, it is clear that remote work, work from home and then telework have been the topic of numerous reports and articles since the end of the 70s. In brief, the development of technologies, from informatics in the 70s to communication and then digital technologies, fed a general discourse presenting the development of remote work, including telework, as a virtuous way to meet a set of different objectives (fostering local economic development, favouring more flexible and efficient work organisations adapted to companies' needs, fighting unemployment, etc.). However, despite this positive intellectual and political context over time, the fact is that work out-of-the-office has not been widespread in practice before the pandemic as far as available statistics show it. Data collected in 2019 showed a steady and low diffusion of telework in France: in 2019, according to the DARES Working conditions survey, 4% of employees teleworked on a regular basis, ie. at least one day per week, and 9,3 % including occasional teleworkers, teleworking at least few days or half days each month. Trends were similar in the civil service. Socio-professional and territorial disparities were visible in this respect: telework mainly covered qualified employees (especially managers), amenability to telework depended more on the type of occupation rather than on the sector of activity, telework was more widespread among employees aged 30 to 49 and telework tended to develop more in the most densely populated areas (especially the Ile de France region).

In this context, there is no doubt that the pandemic corresponds to a breakthrough in the diffusion of home-based telework and in this extent, France does not differ from many other European countries. This was clear as soon as the first national lockdown occurred (mid-march 2020) in response to the dissemination of the virus. However, this development is more a large diffusion of pre-existing practices than completely new, if we consider the characteristics of teleworkers, the sectors most affected or their regional spread.

Key issues in the out-of-office work arisen during the pandemic

The pandemic allowed to approach "*in concreto*" the difficulties related to telework. Work organisation during the pandemic has thus raised many different issues pointed out in a number of very different publications. Some are organisational issues that one could intuitively predict: working time issues, work life balance issues, mental and physical health issues, workers' monitoring issues, issues linked to management of teleworkers. However, the sudden and massive increase in telework practices due to the crisis, also unveiled new issues, especially the selection of employees allowed to telework and the issue of gender equality in respect to telework.

Industrial relation practices to address the issues arisen during the pandemic

Considering the issues unveiled during the crisis, one noticed an increase in social dialogue processes at company level to better regulating this form of work organisation. The National Agency for the improvement of working conditions (ANACT) indeed observed that more than 6 000 collective agreements mentioning

telework had been declared from 1st January 2020 to 4th November 2020. The will to take into account a larger diffusion of telework out of crisis times and to consider a “new normal” also motivated the negotiation of two national and cross-sectoral collective agreements in both the private and public (civil service) sectors. The latter allowed to complement the pre-existing regulations and to provide reference points for actors of social dialogue at decentralised levels to organise telework in a responsible way. We present those agreements in our report. Today, it seems that legal regulation of telework is complete but the evolution in work organisations is still uncertain. While the spread of teleworking is likely to remain higher than it was before the pandemic, office-based work is likely to continue and hybrid work organisations are now being established.

Italy

Definitions and legal regulations

What generally falls under the definition of remote work²⁶ in Italy is currently regulated under three different sets of provisions²⁷. The first one refers to the notion of “telework”, as established in the European Framework Agreement signed on 16 July 2002, transposed in Italy by a cross-industry agreement for the private sector signed on 9 June 2004²⁸. The second one corresponds to the category of “agile work” (smart work), as designed and conceived in Law no. 81/2017. The definition of agile work does not only refer to remote work but implies a result-oriented organisational flexibility in a dynamic work environment in which “spaces, hours and work tools are reshaped in front of greater freedom and empowerment granted to workers”²⁹. The third scheme consists of a “derogated” version of the existing legal scheme of agile work, as designed by the aforesaid 2017 Act. Whereas the first two set of provisions have been introduced before the pandemic, the last one represents a first attempt to simplify the adoption of remote working solutions as a general health and safety measure during the pandemic.

Furthermore, agile work, as conceived in its legislative origin, is strictly connected to organisational autonomy. As many empirical studies have highlighted, the benefits of organizational flexibility are fully realized only if workers decide autonomously where, when and how to perform work, without constraints imposed by the management. With this regard, it is important to highlight how the use of technologies can amplify the exposure of “agile workers” to pervasive forms of control by the employer³⁰.

Facts and figures

Before the pandemic only 10% of Italian employees worked from home at least several times a week during the pandemic, against 15.8% on average in the EU and according to Eurostat data, Italy ranked at the bottom of the EU27 comparison with 3.6% (5.4% in the EU) of employees involved in this working mode. At the end of 2020, the Milan Politecnico's Observatory on smart working estimated at over 6,6 millions of workers in so-called emergency smart working³¹ (or simplified) active in March 2020 (down to 5 million in September, equal to 33.8% of employees) and estimates that in the "new normal" the number will stabilize at 5.3 million.

At the beginning of the emergency, remote working concerned an audience of potential users much wider than usual and more classic smart worker profile (white collars in large companies), coming to include all permanent employees.

Looking at the key characteristics of tele-workers, an Inapp study released at beginning of 2022³², based on a survey conducted between March and July 2021, showed that differently from the first year of the

²⁶ A general definition of remote work in Italy has been elaborated among others by *Iacopo Senatori and Carla Spinelli: (Re-)Regulating Remote Work in the Post-pandemic scenario: Lessons from the Italian experience. Italian Labour Law E-Journal, vol. 14, no. 1 (2021) 209–260.*

²⁷ Iacopo Senatori (2021), Italian Industrial Relations and the Challenges of Digitalisation in Hungarian Labour Law E-Journal 2021/2 <http://www.hlj.hu>

²⁸ https://www.cliclavoro.gov.it/aziende/documents/accordo_interconfederale_telelavoro_9_6_2004.pdf

²⁹ G. Chiaro, G. Prati, M. Zocca, Smart Working: dal lavoro flessibile al lavoro agile, in Soc. lav., 2015, p. 72

³⁰ R. Albano, S. Bertolini, Y. Curzi, T. Fabbri, T. Parisi, DigitAgile: l'ufficio nel dispositivo mobile. Opportunità e rischi per lavoratori e aziende, Osservatorio MU.S.I.C., Working Paper Series n. 03-2017, p. 7 ss

³¹ Please see section 2.3 on the legislative changes put in place after the Covid-19 pandemic.

³² https://oa.inapp.org/xmlui/bitstream/handle/20.500.12916/3420/INAPP_Il_lavoro_da_remoto_modalit%C3%A0_attuative_strumenti_punto_di_vista_dei_lavoratori_PB26_2022.pdf?sequence=4&isAllowed=y

pandemic, where a larger percentage of women as compared with man worked remotely, the percentage of male and female working at least one day remotely is almost the same (respectively 32% and 33%). Instead, the educational qualification is a discriminating element with 54.5% of the employed with a degree or qualification post-graduate worked remotely, compared to 14,6% of those who have at most the middle school certificate. It is clear that this data is strongly affected by the relationship between the qualification and the profession carried out which, in some cases, does not allow the work to be carried out in a place other than the company's one.

Regulation remote work through Covid-19 pandemic and the role of collective bargaining

Collective bargaining has always played a fundamental regulative role on remote work in Italy. All the operative and substantive provisions related to telework have been formally introduced by the multi-level system of collective bargaining originated by the European Framework on Telework. About telework, the law has rarely interfered with contractual rules. Most of the times, it has supported the regulatory function of collective bargaining in telework by requiring that all teleworking arrangements should be mediated by social partners in collective agreements. Company-level bargaining has mainly dealt with specific organizational patterns like working hours and the modalities of the rotation between remote and on-site performances, adapting the standard rules by means of increasingly flexible arrangements tailored on company-specific needs.

With the 2017 Act on "agile work" a new process of "legification" in the regulation of remote work has begun. The main intent behind all the agreements concluded before Law 81/2017 was to establish flexible organisation arrangements different from telework. In its attempt of pushing company to go beyond telework as a form of "remote work", the legislation on agile work has also pursued a strategy of marginalisation of collective bargaining. As a matter of fact, Law 81/2017 never mentions collective bargaining as regulatory source of agile work: individual agreements are the only formal means to translate the legislative principles and guidelines into detailed operational arrangements

Due to the health emergency related to Covid-19 outbreak, the normative framework on remote work has been drastically simplified and amended both in the private and in the public sectors. The new simplified regime deviates significantly from the ordinary ruling system in two fundamental aspects. In the voluntary activation of agile work: agile work can be activated also by a unilateral employer's decision without the formal employee's consent expressed by the individual agile work pact,. In the extension of the right of agile work with particular attention to workers with care responsibilities and workers with disabilities³³: if it is compatible with the specific job, the employer is obliged to accept every request coming from an eligible worker.

Trade unions have harshly criticized this legislative change, as it would leave the regulation to the discretionary power of the public managers. Trade unions claimed for the central role of collective bargaining with reference to all aspects of the agile employment relationships and, firstly, to the most controversial aspects related to the economic and regulatory treatment to be applied to agile workers: overtime and leaves, the attribution of meal vouchers, the responsibility for the use of ICT equipment, data protection and privacy issues, the right to disconnect. Under pressure of social partners, nevertheless, the relationship between legislation and collective bargaining on remote work issues has been changed during the pandemic. The tripartite agreement on agile work signed on 7th December 2021 by the Ministry of Labour and the main

³³ Disabled workers, workers with immunodeficiencies and people who live with them, workers in other conditions of health vulnerability that may increase the risk of being affected by COVID-19; parents of children under the age of 14 affected by school closures.

trade unions and employers' organisation representing the private sector³⁴ may be considered a step forward in the formal acknowledgement of the role of collective bargaining as a regulative source of agile work. As a matter of fact, the protocol emphasizes the "pivotal role" of collective bargaining, whose function was absolutely neglected in the Law 81/2017, and in the art. 15 the social partners agree on the need to encourage the correct use of agile work also through public incentives for companies that regulate agile work by collective bargaining.

³⁴ Cgil, Cisl, Uil, Ugl, Confsal, Cisa, Usb, Confindustria, Confapi, Confcommercio, Confesercenti, Confartigianato, Cna, Casartigiani, Alleanza cooperative, Confagricoltura, Coldiretti, Cia, Copagri, Abi, Ania, Confprofessioni, Confservizi, Federdistribuzione, Confimi e Confetra

Poland

Definitions and legal regulations

There are three forms of out-of-office work identified in Poland: teleworking, working from home and ICT-based mobile work among which only the first one has been regulated since 2007 (the Act of 24 August 2007 amending the Labour Code). Teleworking is the form of work that may be performed entirely outside the workplace, using electronic means of communication, while working from home assumes the possibility to work both at home and at employer's premises under various patterns and work arrangements. ICT-based mobile work, on the other hand, refers to work arrangements carried out at least partly and on a regular or occasional basis outside a worker's 'main office' – not necessarily at home, using information and communication technologies (ICT) (eg. sales representatives, service technicians, archaeologists, etc.).

As a result of the COVID-19 pandemic some temporary measures were introduced to regulate working from home. The article 3 of the Act of 2 March 2020 on specific solutions related to the prevention and combating of COVID-19, other infectious diseases and crisis situations caused by them allowed for working from home if a worker has the technical conditions, skills and capabilities to perform such work. In 2021, the government announced the intent to enact a new law introducing working from home to the Labour code as a permanent option. This legislative initiative has been the key answer to the phenomenon of working from home which rapidly emerged under the impact of the pandemic in 2020.

Facts and figures

In 2019, there were 28.2 thousand teleworkers in Poland which constituted less than 0.2 % of total labour market in the country (almost equally distributed between genders, with only slight prevalence among men). A systematic growth could be observed in teleworking throughout the whole period covered by the public statistics from 7.6 thousands in 2014. In 2020, when the COVID-19 pandemic started, the growth was also notified up to 32.4 thousand teleworkers, but its dynamics was lesser as compared to previous years.

According to Eurostat, only 4.6% of employees worked from home in Poland in 2019. The figures varied in the period 2011-2019 between 4.0% and 5.6% which might be considered as a rather stable and low level of this form of employment as compared to the EU averages. The Eurostat data show that a slightly higher proportion of women in Poland usually worked from home: 4.9% to 4.3% (men), which reflected also the general tendency in the EU. The COVID-19 pandemic had a significant impact of the scale of working from home. As much 12% of workers usually worked from home in the UE and 8.9% in Poland (10.5% women and 7.6% men) in 2020. This means a rise by 94% between 2019 and 2020. CBOS study showed that working from home was reserved to only some workers groups – white collars, better educated, working at offices (2020, 2021), while blue collar workers, some service workers, as well as the so called essential workers did not have equal access to working from home as a protection measure against COVID-19 infections. The study confirmed also that the more women (27%) than men (15%) worked from home.

Some more detailed studies on working from home were conducted at the national covering not only scale and (sectoral, geographical, etc.) distribution but also perception of benefits and disadvantages of working from home.

According to the Institute of Public Affairs' study (2018) 23% workers performed at least once the ICT-based mobile work and 28% intended to take up or continue this for of work in the future. ICT-based mobile work was overrepresented among young and middle-aged workers, and workers with higher education and among the self-employed. Data on development of ICT-based mobile work during the COVID-19 pandemic is not available.

Social dialogue and public debate on working from home

Due to deficits of the social dialogue in Poland, the key point of the debate related to out-of-office work was the draft legislation on working from home and details of its provisions. Collective bargaining regulating working from home during the COVID-19 pandemic was conducted at company level only, scale and characteristics of which is unknown. Significant delay in enacting the new law resulted in discontent among the social partners – especially the trade unions. The adoption of the law was first announced to take place in Autumn 2021. At the time of drafting this report, this law was still not enacted (May 2022). In response to the draft bill, trade unions expressed their concerns regarding the costs of working from home, which workers must additionally bear, and the extension of working hours often beyond the working time standards set out in the Labour Code, due to blurring boundaries between work and family life. The unions postulated to introduce a supra-company agreement setting out the principles for working from home and standardisation of the minimum rate of the cash equivalent for workers. They also objected to provisions stating that it is the responsibility of workers to adapt working conditions at home that comply with health and safety regulations.

Romania

In Romania remote working was regulated before the Covid 2019 pandemic in the forms of working from home and teleworking, but they were not frequently encountered in the practice of labor relations. Considering the content of the applicable rules, general and particular, these recognized forms are different from the work from anywhere. The Labour Code (Law no 53/2003 republished) represents the general framework for the work relationships, including the conditions applicable to the individual work contract. It regulates homeworking and Law no 81/2018 regulates teleworking activity. At the same time, Law no 62/2011 on social dialogue contains a comprehensive regulation on social dialogue, collective negotiations, and collective working contracts).

However, it does not regulate teleworking, working from home, or remote working generally. Law no 81/2018 on the regulation of teleworking activity contains legal definitions for the terms telework and tele-employee and details on this type of work and the fields in which this legal regime may be applicable. According to Article 2a) telework represents the form of work organization through which the employee, regularly and voluntarily, fulfills the specific duties of his position, occupation, or trade he holds elsewhere than the workplace organized by the employer, by using information and communication technology. The person carrying out this activity is called a teleworker (Article 2 b). In comparison with the working-at-home concept whose features are provided by the Labour Code, this form implies the use of information and communication technology. After the outbreak of the Covid 19 pandemic, special regulations were adopted in Romania that affected work relationships. Decree no. 195/2020 on the establishment of a state of emergency in Romania, provided in its Article 33 that central and local public institutions and authorities, autonomous administrative authorities, autonomous utilities, national companies and corporations, and companies in which the state or an administrative-territorial unit is a shareholder private or majority companies, private equity firms introduce, where possible, during the state of emergency, work at home or in telework, by the unilateral act of the employer.

This constitutes an exception to the principle of consensual applicable to the conclusion and modification of the employment contract between the employer and the employee as it implies that the employer has the obligation to introduce work at home or in telework and can do so even by a unilateral act. Law no 55/2020 on some measures to prevent and combat the effects of the COVID-19 pandemic contains rules regarding the performance of employment contracts in the form of teleworking or work from home. According to Article 17: During the state of alert, the employer may order, with the consent of the employee, to carry out the activity in the mode of telework or work at home, to change the place of work or his duties. The consent of the employee continues to represent an essential element for the changes in the place of work and/or duties, even in the special context generated by the Covid 19 pandemic. The Government Emergency Ordinance no 36/2021 on the use of electronic signatures in the field of labor relations and for the amendment and completion of certain normative acts made some changes to the legal framework. Overall, the Romanian legislation on working at home and teleworking proved to be flexible enough and adequate to respond to the challenges of the Covid 19 pandemic in the labor environment. However, although the legal framework provides important aspects such as the organization of the schedule, safety, and health regulations, there are no express provisions on the right to disconnect or on balance between working hours and private life. Furthermore, national legislation does not specifically address the issue of respect for personal data (by providing special obligations for the employee) thus, the recommendations of the European Union Agency for Cybersecurity are useful in this regard.

To see how and how much work was done online before and during the pandemic, we applied several questionnaires to several actors: Universities, IT companies and local administration. The conclusions of these questionnaires are presented below. Before the pandemic, in universities, and in IT companies there were several activities that took place outside the classrooms and offices. At the University, it was natural for work on projects and weekly homework to be done from home, and their results to be presented at subsequent meetings or even sent by e-mail. For IT companies, although working from home was not natural, it happens that in the case of sick employees or those who had children, they have certain days when they could work from home. Usually, the number of these days increased in proportion to the age of the employees and the number of their children. In the Administrative sector, working from home was not a natural thing, as there was no legislation or regulations to allow this. Also, the computer systems could not be accessed from outside the office at work, making it impossible to work from home. The activities carried out at home mentioned by those who answered our questionnaire are related to the deepening of the legislation, the finalization of some reports, and the editing of some word or excel documents.

During the pandemic in Universities and in IT Companies: if before the pandemic, only in the case of exceptions it was possible to work from home, during the pandemic, it was upside down. Only the exceptions could work from the office, entering administrative activities, or in cases when the Internet connection at home was insufficient. Also, because the children learned from home, the parents often rotated so that one of them could reach the office and focus better on the tasks he/she had. In the case of those in the Administration, even if the percentages related to working from home have increased compared to before the pandemic, they still remained small.

The reasons are primarily due to the lack of adequate infrastructure and the lack of activities that could be done from home. Among the activities done at home, there are telephone conversations with various partners or with citizens who needed help or clarification in case of specific problems. Usually, older people have difficulty adapting to the use of online tools and have often asked for help.

The problems during the pandemic for those who worked from home were of several types.

(1) Internet connection problems: the issues are related to the fact that more family members are working from home. For this reason, the bandwidth became insufficient.

(2) Lack of hardware resources: when several family members needed to connect at the same time to daily activities, computers, microphones, speakers, and video cameras in the house became insufficient.

(3) Lack of space: It was also very difficult to find an area for each member of the family, so they could participate in activities without interfering with others.

(4) Cybersickness: Due to the drastic change in the way work was done and the need to stay at the computer for many hours, health problems began to appear. These include back, neck, and eye pain, dizziness, fatigue, etc. From our questionnaires, we observe that were many people emotionally affected by the pandemic. The most affected sector was the University sector, where the lack of interaction affected teachers and students quite a lot. Those in the local administration were least affected, and even though they often worked physically in the office, they were affected by the pandemic's worries. In conclusion, all the actors involved (local authorities, company management, employees, and trade union groups) collaborated in order to find optimal solutions that would allow the continuation of activities during the pandemic. After the end of the pandemic, everyone has the problem of carrying out activities at home to a greater or lesser extent.

Spain

Definitions, regulations and related legal issues of out-of-office work in Spain

The current legislation of work from home contracts in Spain is based on the 2020 revision of prior laws, which stipulate the following basic principles:

- The place of work can be freely chosen by the worker with no employer supervision;
- The wage shall be at least equal to that of a worker of equivalent professional category in the economic sector concerned;
- Remote workers shall have the same rights as those who provide their services at the company's main work premises;
- Remote workers have the right to adequate health and safety protection;
- The employer must establish the necessary means to ensure workers have effective access to vocational training for employment to favour their professional promotion;
- Remote workers may exercise collective representation rights in accordance with the current laws.

Pre Covid-19 diffusion of out-of-office work in Spain, related opportunities and threads and regional differences

According to the Spanish Labour Force Survey, prior to the COVID pandemic, the uptake of out-of-office (OOO) work in Spain had been moderate and slowly increasing (Fig. 1), up to 4.5% in 2019. The leading regions were Asturias (6.6%), Illes Balears (5.8%) and Galicia (5.5%), while the lowest ranking were Murcia (4.0%), Navarra (3.9%) and La Rioja (3.6%).

Of the almost 20 million employed people in Spain in 2019, 8.4 % indicated that they worked at home occasionally, and 4.5 % that they worked at home more than half of the working days (see Table 1). These figures represent an increase in occasional remote working compared to 2009, when 6 % of all workers reported that they worked from home occasionally.

Looking at the characteristics of remote work by activity, there is high heterogeneity depending on occupation and sector (Table 1). In particular, OOO work is most frequent among:

- Self-employed individuals, while among employed workers it is more prevalent for those with permanent contracts and longer job tenure;
- In medium-sized enterprises (50-250 employees): in the period 2009-2019 the share of remote work in enterprises with more than 50 employees had increased from 16 % to almost 20%;
- Among high-skill employees (i.e., directors, managers, technicians and professionals) while mid-skill workers (i.e., accountants, clerical workers) are underrepresented;
- In education, scientific and technical professional, real estate activities, information and communication, financial and insurance sectors. It is less frequent in agriculture but also in industry, water, electricity supply and waste management.

Table 2 - Working from home by type of activity (Source: INE)

Working from home	Never		Occasionally		More than half the worked days	
	Tot empl.	%	Tot empl.	%	Tot empl.	%
Total	17,933,285	100.0	688,671	100	951,783	100
Employment situation						
Permanent employee	11,551,792	64.4	242,961	35.3	319,220	33.6
Experience: less than 1 year	753,354	6.5	13,543	5.6	13,795	4.3
Experience: 1-3 year	1,664,107	14.4	42,979	17.7	29,141	9.1
Experience: 3-7 year	2,095,773	18.1	40,941	16.8	36,551	11.5
Experience: more than 7 year	7,038,558	60.9	145,517	59.9	239,733	75.1
Temporary employee	4,215,613	23.5	42,969	6.2	94,442	9.9
Self-employed	2,164,444	12.1	402,721	58.5	537,604	56.5
Company size						
1-49 employees	11,719,350	70.3	541,452	80.0	751,326	80.8
50-249 employees	2,596,447	15.6	74,232	11.0	131,564	14.1
250 or more employees	2,346,502	14.1	61,381	9.1	47,002	5.1
Occupation						
Army	107,995	0.6	328	0.0	1,674	0.2
Directors and managers	566,224	3.2	86,551	12.6	100,555	10.6
Tech., sci. and intellectual prof.	2,715,910	15.1	275,717	40.0	494,249	51.9
Support tech. and professionals	1,823,990	10.2	120,116	17.4	151,065	15.9
Clerks, admin. and other jobs	1,988,470	11.1	33,608	4.9	30,388	3.2
Hospitality, personal, protection and salesman	4,340,250	24.2	67,452	9.8	69,307	7.3
Qualified agriculture., livestock	398,459	2.2	30,228	4.4	23,234	2.4
Craftsmen	2,058,185	11.5	57,886	8.4	60,195	6.3
Plant and machinery operators	1,432,249	8.0	10,540	1.5	9,166	1.0
Elementary occupations	2,501,552	13.9	6,245	0.9	11,951	1.3
Activity sector						
Agriculture, livestock & fishery	783,758	4.4	31,642	4.6	25,927	2.7
Manufacturing	2,315,950	12.9	62,141	9.0	54,243	5.7
Supply of electric power, gas, steam, air conditioning	85,294	0.5	3,786	0.5	2,082	0.2
Supply of water, sewerage activities, waste management	149,843	0.8	2,757	0.4	3,078	0.3
Construction	1,186,814	6.6	58,553	8.5	62,373	6.6
Trade, vehicle repair	2,817,005	15.7	94,948	13.8	109,515	11.5
Transport and storage	954,499	5.3	18,444	2.7	14,716	1.5
Hospitality	1,694,500	9.4	17,106	2.5	20,782	2.2
Information and communication	475,544	2.7	51,778	7.5	55,570	5.8
Financial and insurance	370,906	2.1	21,150	3.1	21,243	2.2
Real estate activities	113,877	0.6	13,866	2.0	22,171	2.3
Professional scientific & technical	714,512	4.0	102,334	14.9	158,347	16.6
Administrative and auxiliary	1,005,164	5.6	21,339	3.1	25,842	2.7
Public admin, defense	1,304,465	7.3	10,665	1.5	15,372	1.6
Education	929,455	5.2	121,358	17.6	275,356	28.9
Health, social services	1,639,161	9.1	23,813	3.5	29,281	3.1
Artistic, recreational and entertainment	377,642	2.1	19,655	2.9	24,760	2.6
Other services	415,966	2.3	13,339	1.9	18,646	2.0
Housekeeping	597,902	3.3			12,478	1.3
Event organization & extraterritorial organizations	1,028	0.0				

Source: Instituto Nacional de Estadística (Encuesta de Población Activa), microdata from 2019 annual subsurvey.

Note: to identify teleworking, the question "Did you work at home in the last four weeks (possibility foreseen in the work agreement)" is used. The response options are as follows: "More than half of the days you worked", "Occasionally", or "Never".

Looking at the socio-demographic characteristics of employees before COVID (Table 2) the probability of remote work is higher for:

- Men, although the gap with women was small until 2019;
- Elderly workers, particularly from the age of 55 onwards;
- Individuals with a university degree or higher, who are more than twice as likely to work remotely;
- One-person households and for two-adult households with more than one child.

Table 3 - Sociodemographic characteristics of working from home employment, 2019 (Source: INE)

Working from home	Never		Occasionally		More than half the working week	
	Tot empl.	%	Tot empl.	%	Tot empl.	%
Total	17,933,285	100.0	688,671	100	951,783	100
Gender						
Male	9,689,392	54.0	424,712	61.7	522,996	54.9
Female	8,243,892	46.0	263,959	38.3	428,787	45.1
Age						
16-24	1,008,605	5.6	6,000	0.9	15,549	1.6
25-34	3,534,258	19.7	110,021	16.0	134,774	14.2
35-44	5,213,683	29.1	231,774	33.7	287,435	30.2
45-54	5,029,404	28.0	206,741	30.0	297,709	31.3
55-64	2,962,543	16.5	128,114	18.6	192,285	20.2
65 o more	184,792	1.0	6,020	0.9	24,032	2.5
Education						
Lower than high school	5,956,036	33.2	103,183	15.0	118,405	12.4
High school	7,089,177	39.5	192,781	28.0	208,539	21.9
University degree and/or more	4,888,071	27.3	392,707	57.0	624,839	65.6
Type of household						
1 adult home	1,762,935	9.8	79,661	11.6	127,150	13.4
Single parent with children	792,374	4.4	19,649	2.9	37,167	3.9
2 adults without children	3,866,402	21.6	170,194	24.7	187,569	19.7
2 adults with 1 child	2,478,293	13.8	104,391	15.2	156,242	16.4
2 adults with more than 1 child	3,972,941	22.2	193,369	28.1	228,258	24.0
Others	5,060,339	28.2	121,407	17.6	215,396	22.6

Source: Instituto Nacional de Estadística (Encuesta de Población Activa), microdata from 2019 annual subsurvey.

Note: to identify teleworking, the question "Did you work at home in the last four weeks (possibility foreseen in the work agreement)" is used. The response options are as follows: "More than half of the days you worked", "Occasionally", or "No days".

Out-of-office work diffusion during the pandemic in Spain: sectoral, regional differences and characteristics of the workers involved

Labour Force Survey data for Spain show a rapid adoption of remote work in Spain from the second quarter of 2020 to the first quarter of 2021, and even after the period with the strongest restrictions OOO work remains twice as high relative to before COVID.

The figures vary depending on the evolution of the pandemic. In 2020, remote work for most of the working week rose to 78.6% of all employees in the second quarter, to 84% in the third quarter onwards, before falling back to 82.5% in the first quarter of 2021. OOO work in this period was more frequent among:

- Women, more than two percentage points above men overall;
- People in between 35-45 years – in which child and dependent care is more frequent;

Looking at regional patterns, Madrid and Catalonia lead the way with shares of 26.6% and 18.5% respectively in Q2 of 2020, and 21.6% and 15.2% in the first quarter of 2021. At the other end of the spectrum are Navarre, Murcia and Aragon, with shares of 12.5%, 10.6% and 12.6% respectively in 2020 Q2, and 6%, 5.5% and 5% respectively in 2021 Q1.

The survey INE ETICCE (2021) provides an insight into remote work from the perspective of business firms. During the first quarter of 2021, half (50.6%) of Spanish companies allowed their employees to telework. Overall, remote work rates in this time period were higher among employees in large companies than among medium-sized and small companies. Thus, 85% of large companies allowed their employees to telework, compared to 72% of medium-sized companies and 46% of small companies.

In addition to the degree of digitisation of enterprises, the type of business activity also influences the adoption of telework. Sectors associated with physical or goods production, such as construction (38.3%), accommodation services (40.5%), food (40.5%), metalworking (41.2%), administrative and support services (43.9%), wholesale and retail trade (45.9%) and transport and storage (49%) had lower rates of remote work during this time period.

Key issues and problems in the out-of-office work arisen during the pandemic

In spite of the speed at which the first lockdown occurred between March and May, only 23.8% of Spanish workers reported serious difficulties with working from home (Telefonica, 2021). The main issue was insufficient internet connectivity at home (54.5%), more commonly among older workers – 71.4% among those aged 55-64, and 62.8% among those aged 45-54. It was also more reported by teleworkers living independently (70.3%) and by teleworkers with independent children (66%). The next most common difficulty reported by teleworkers was the difficulty of combining work and family life (35.8% of respondents). This was more evident for women (44.2%) than for men (27%). By type of family, this problem was most relevant for families with young children (64.7%). Among other issues, trouble with remote work tools (19%) was much more pronounced among women (31.8%) than among men (5.5%), and problems in establishing a work routine at home (17.9%). Again, women reported this difficulty to a greater extent than men (25.3% compared to 10%).

Regarding the composition of households and the characteristics of dwellings, almost 60% (58.5%) of 20-64 year olds 44 reside in a dwelling in which there is at least one space suitable for remote work , compared to just over 40% (41.5%) who would not.

From the problem to the solution: industrial relation practices to address the key organisational issues arisen in the out-of-office work during the pandemic

A number of critical issues emerge from the reports published in the period post 2020. Below is a list of the most frequent, and still unresolved, challenges:

- Establishing clear barriers between working time and personal time;
- Adapt housing to the needs of remote work;
- Equipping companies with the technical means and workers with appropriate skills;
- Accounting for remote work on urban and regional transformation policies, both to readapt areas that may lose population or activity, and to prepare areas that may experience population growth;
- Promoting policies that favour job creation and improve the employability of people who have been badly affected by the crisis. This implies, among other things, strengthening digital skills and offering

training in line with the demands of a changing labour market – therein including the rise of remote work.

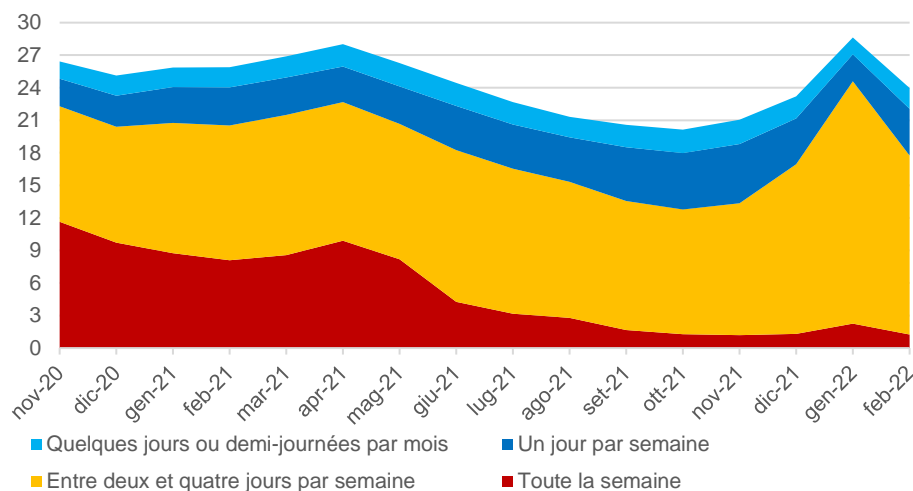
2.2 A comparative overview across the five selected countries

Diffusion of remote work during the pandemic

In this section we provide a comparison between the five selected countries with regard to the diffusion of remote work before and after the pandemic. As an overview on this issue at European level has been provided in Chapter 1 here focus on some additional elements derived from the single Country reports.

France experienced a significant jump in the first months after Covid-19 outbreak (from about 4% of employees to 30-40%) but later the situation evolved according to the pandemic and the related, more or less restrictive measures taken by the government over time. In particular after several months of 2021 where something less than 30% of employees were teleworking, this level started to decrease towards the end of the same year, to experience again a jump at the beginning of 2022 when a new pandemic wave took place. It is interesting to notice that the share of employees that work all the week from home almost disappeared at the end of 2021, while most of the employees telework between two and four days per week.

Figure 14 - Evolution of telework from November 2020 to February 2022, all sectors of activity (in % of employees) (source: DARES)³⁵



The case of Italy is quite similar to the French one as before the pandemic a very small percentage (only 10%) of employees worked from home at least several times a week during the pandemic, while at the end of 2020 over 6,6 millions of workers in so-called emergency smart working³⁶ (or simplified) active in March 2020 (down to 5 million in September, equal to 33.8% of employees). During 2021, with the advancement of the vaccination campaign, the number of smart workers progressively decreased, passing from 5.37 million in the first quarter of the year to 4.07 million in the third quarter. However, this gradual return to the office does not generally mark a decline in Smart Working, on the contrary, at the end of the pandemic, organizations expect an increase in smart workers compared to the numbers recorded in September: 4.38

³⁵ Light blue : telework a few days or half-days per month ; Dark Blue : telework one day per week ; Orange : telework from 2 to 4 days a week; Red : telework full week

³⁶ Please see section 2.3 on the legislative changes put in place after the Covid-19 pandemic.

million workers are expected to operate at least in part remotely (+ 8%), of which 2.03 million in large enterprises, 700 thousand in SMEs, 970 thousand in micro-enterprises and 680 thousand in the PA.

The case of Poland, does not look again too different as the Labour Force Survey operated by the Statistics Poland in 2020 showed that there were over twice as many people usually performing work at home in the second quarter of 2020 as compared to the first quarter. Out of the general number of 2,124 thousand of persons working from home 1,539 thousand of persons (72.5%) worked at home due to the situation related to COVID-19 pandemic. After loosening restrictions related to the pandemic later the number of homeworkers significantly decreased and in the fourth quarter increased to 1,609 thousand people. Also in Romania and Spain the number of employees working remotely jumped at the very beginning of the pandemic, to almost 400 thousands in the first case and to over 3 million in the second, to see then a stabilisation or even a fall, as in the case of Spain.

In all the examined Countries then, after the significant jump in the number of teleworkers in the first part of 2020, the tendency was a significant decrease towards a kind of “normality” setting which saw a significant number of people returning to the office.

There are not significant differences neither with regard to sectors and occupations between the five selected Countries. In almost all the Countries the highest percentages of employees teleworking during the pandemic were in the service sector (most of all in Business services) and in the public administration and teaching activities. In general terms the adoption of teleworkers was more common in jobs that do not require physical contact between provider and client, such as education, scientific and technical professional activities, real estate activities, information and communications, artistic, recreational and entertainment activities, and financial and insurance activities. It was instead more limited in agriculture, of course, but also in industry and in the supply of electricity, water, sanitation and waste, where there are potentially quite a number of jobs that could be done from home. There was also limited use in some services that generally require physical contact with customers, such as domestic service, hospitality and health activities. With regard to occupations working from home was more widespread among some workers groups – white collars, better educated, working at offices.

Looking at the socio-demographic characteristics of employees, during the pandemic the percentage of men and women working remotely was very similar even if in some countries like Italy the level of women teleworking before the pandemic was much smaller than men, so that this group experienced a much higher jump in particular at the beginning of the pandemic. By age, in all the countries with available data, the incidence of teleworking increases with age, and is particularly high from the age of 55 onwards and, above all, for those over 65.

Finally, looking at the geographical distribution, in France Paris and the Ile de France region concentrated the highest number of teleworkers; the less densely populated the area of residence was, the less telework occurred. Similarly happened in Poland and in Spain.

Changes in national regulations of remote work after the Covid-19 outbreak

During the pandemic, all the European Governments have encouraged the use of remote working as a preventive measure to contain the spread of the Covid-19. While the analysis on the pre-Covid regulation of remote work has been conducted in a comprehensive European perspective taking into consideration all the different EU countries, the comparison of the different changes affecting remote-work regulations after the Covid-19 outbreak is mainly focused on the IRSmart partner-countries and so Italy, Spain, France, Poland and Romania. Nevertheless, it is worth providing a general framework of the different regulative approaches in Europe. According to a comparative review conducted by EU-OSHA³⁷, by March 2021 (a reasonable amount of time for monitoring what national regulatory changes have occurred since the Covid-19 outbreak), a marginal number of countries have implemented specific changes on the legislation/regulation on remote work (Italy and Spain among the IRSmart partner countries and also Luxembourg, Latvia and Slovakia) while for most of the EU countries legislation is either under reform or has not changed at all.

		Post Covid-19 new specific legislation on teleworking		
		Yes	Under review	No
Pre-Covid-19 statutory definitions and specific legislation on teleworking	Yes	Spain, Italy , Luxembourg, Slovakia,	Belgium, Germany, Hungary, Croatia, Malta, the Netherlands, Poland , Portugal, Slovenia,	Bulgaria, Check Republic, Estonia, France , Greece, Lithuania, Romania
	No		Austria, Cyprus, Ireland	Denmark, Finland, Sweden, Latvia

The comparative analysis of IRSmart national reports is aimed at better defining what type of changes have occurred and verifying to which extent classification proposed by EU-OSHA is still coherent according to the recent developments in terms of national regulation of remote work.

Italy, coherently, still belongs to the group of countries in which the regulation on remote work has been modified as it was drastically simplified and amended both in the private and in the public sectors. While in the public sector remote work was even declared to be the ordinary way of carrying out the working activity, the main changes affecting remote work, both in private and public sectors, are in the direction of circumventing the employees' voluntary principle and extending the eligibility criteria for workers with care responsibilities. Regulation on remote work in Italy has been modified not only in its legislative forms and purposes but also in a new "pivotal role" of collective bargaining, both at the national and company level, whose acknowledgement as a central regulative source on remote work is well expressed by the Tripartite Agreement on agile work signed on 7th December 2021 by the Ministry of Labour and the main trade unions and employers' organisations. Spain belongs to same group of Italy as with the introduction of the Royal Decree Law 28/2020 it changed the statutory definition of telework to encompass any form of remote work that meets some specific criteria of duration³⁸ and regulates the right to disconnect, specific health and safety aspects (ergonomics, psychosocial and organisational aspects) and the distribution of working time. Also in this case, the legislative changes are based on agreement with social partners.

Among the three different forms of remote work pre-existing to the Covid-19 (teleworking, working from home and ICT-based mobile work) in Poland, some temporary measures were only introduced about working from home with a view to formally allowing its extension as a form a preventive measure during the

³⁷ EU-OSHA, Sanz de Miguel, P., Caprile, M., Munar, L., *Regulating telework in a post-COVID-19 Europe*, Publications Office, 2021, <https://data.europa.eu/doi/10.2802/125499>

³⁸ The law establishes as remote work the work carried out by an employee outside the workplace, provided that it represents at least 30% of the working day and is carried out over a period of at least 3 months

pandemic. Also in this case, the measures are in the direction of bypassing employees' consent. With this regard, it should be pointed out, as stated in the Polish national report, that working-from-home became the dominant form of remote work in the pandemic due to its "relaxed regulation" and temporary/flexible form of work arrangement as compared with telework, that is the only regulated form of remote work before the Covid-19 outbreak. In 2021, the Polish Government has announced the intention of introducing working-from-home to the Labour code on a permanent basis and because of this, hypothetically, the legislation on remote work in Poland is considered "under review" in the EU-OSHA classification. According to the EU-OSHA report, the legislative reform will replace the concept of telework with remote work but relies on the voluntary principle, whose application can be derogated or amended only in specific crisis-situations, and extends and strengthens workers' rights (eligibility criteria more based on care responsibilities and clearer responsibilities of employers in terms of provision of ICT tools and materials and cost coverage).

In contrast to the EU-OSHA schemes, special regulations on remote work were adopted also in Romania. The different legislative initiatives adopted after 2020 are mainly aimed to extend the use of remote work as a measure to prevent and combat the effects of Covid-19 pandemic. Among the different organisational issues of remote work regulated by law (health and safety and working time schedules), the diverse regulatory changes deal with, also in this case, the employees' consent: in the state of emergency (decree n. 19/2020) the public employers can activate forms of remote work unilaterally. It is worth noting that this limitation is applicable only in public sectors while in private sectors the employees' consent is still "an essential element". Given these premises, it is possible that the Romanian case belongs to the group of those countries that have not made any regulatory change in remote work legislation because the application of the special regulations during the pandemics, as stated in the Polish national report, is strictly related to the state of emergency. France also belongs to those countries that have not modified legislation on remote work after the Covid-19 outbreak but this does not mean that the regulatory framework has not changed during the pandemic. As a matter of fact, in 2021 the social partners in France issued a new cross-sectoral agreement that replaced the 2005-2006 transposition agreement of the EU Framework agreement on telework and complements pre-Covid-19 legislation on telework. The need of a new cross-sectoral agreement on telework has been planned since 2017 and has found in the pandemic, and in its radical impact on work organisation, a "new impetus" of social partners, also with a view to avoiding a legislative intervention. However, it should be highlighted, as stated in the French national report, that the agreement became legally binding for all private companies from 13th April 2021 but, according to the legal rules on collective bargaining, *"it's possible for a company to deviate from the agreement by concluding a company collective agreement on the topic"*.

If we look at the structural and temporary modifications of the remote work regulation in the different partner countries it is possible to identify some common tendencies:

- Perceived as a work arrangement to stimulate working performance (productivity) and to facilitate work-life balance, remote work during the pandemic has been mainly used as a measure to prevent the spread of the Covid-19 infection. From an organisational work arrangement, it has been treated actually as a measure of public safety with a radical change in its application: a large part of the countries has extended the eligibility criteria to those workers with care responsibilities;
- the principle of voluntary has been often suspended to simplify and accelerate the activation of remote work in both private and public sectors. The balance of power between employees and employers seems to be deviated in favour of the latter. Although the severity of the reasons and the circumstances that led to this legislative choice are undeniable, still a significant body of research shows that the abrupt and unilateral shift to remote work may trigger a negative impact on the quality of work and the well-being of workers;
- during the pandemic, the relationship between collective bargaining and legislation on remote work issues has been positively relaunched in those country in which industrial relations are more structured and the role of social partners in a regulatory function has grown even in those countries

in which the role of collective bargaining on remote work was formally marginalized before the Covid-19 outbreak (Italy).

Positive and negative aspects related to remote working

As seen with regard to the key changes in the adoption of teleworking after the pandemic, also with regard to the positive and negative aspects of remote working the experiences across the analysed countries appear very similar although some countries have stressed more some aspects than others.

With regard to the organisational issues, the negative aspects that have been reported appear to overcome the positive ones. In particular, the access to appropriate technologies and space at home, the lack of immediate contact with colleagues, not clear indications on duties and tasks were the more common negative issues. On the positive side, in the Italian case was reported a better organisation of own work, workers feeling more efficient in carrying out their duties with no particular repercussions in terms of communication between colleagues. In terms of working time issues, both France and Poland reported the tendency to work longer hours and this the feeling of working all the time.

Work life balance and mental health are the aspects reporting more evidence the across the analysed Countries, both on the positive and negative side, although the negative aspects look to be predominant. In terms of work life balance, almost in all Countries employees experienced a worsening of work-life balance, in particular for people leaving in small houses with young kids (home-work conflict) and, for all, and erosion of the separation between work and private life. Others have experienced instead an improvement of work life conditions as this aspect strongly depends on personal and family conditions. For those who commute of course remote working represented a great opportunity for improving work life balance.

Also with regard to mental health positive and negative aspects came up, with a prevalence of the second ones. The increase in time pressure and inappropriate target figures, depression, isolation, the feeling of being detached from the workplace and colleagues and difficulties in concentrating on work due to the presence of other household members are the most common problems. Together with mental health problems teleworking caused also physical health problems like back pains, wrist pains or ocular pains.

Finally, in some Countries, again on the negative side, was pointed out that the equipment was not always provided by the employer and some new issues that have been somehow revealed by the pandemic period like for example the fact that the lack of social contacts and feeling of isolation was especially experienced by women and parents of young kids, together with some "Selection practices" of employees allowed to telework put in place by the employers.

Table 4 – Positive and negative aspects of remote working as experienced in the five analysed Countries

		France	Italy	Poland	Romania	Spain
Organisational issues	Positive		Better organisation of own work. Workers felt more efficient in carrying out their duties. No particular repercussions in terms of communication between colleagues.			
	Negative		Accessing tools and technologies. Indications on duties and tasks not clear. .	Lack of immediate contact with colleagues.	Accessing tools and technologies. Lack of space for home-workers.	
Working time issues	Positive					
	Negative	Teleworkers might be more exposed to long working hours and atypical working hours than non-teleworker, especially for full-teleworkers		Feeling of working all the time.		
Work life balance issues	Positive	Improving work-life balance, depending on general conditions (home-work conflict).	Improvement of work-life balance, depending on general conditions.	Time savings for commuting.		
	Negative	Worsening of work-life balance, depending on general conditions (home-work conflict). Erosion of the separation between work and private life.	Worsening of work-life balance, depending on general conditions (home-work conflict). Erosion of the separation between work and private life.	Erosion of the separation between work and private life.		Erosion of the separation between work and private life.
Mental health issues	Positive	Improvement of workers' satisfaction.	Improvement of workers' satisfaction.			
	Negative	Increase in time pressure and inappropriate target figures. Depression. Isolation.	Technostress. Feeling of being detached from the workplace and colleagues.		Technostress Difficulties in concentrating on work due to the presence of other household members.	Feeling of being detached from the workplace and colleagues. Difficulties in concentrating on work due to the presence of other household members.

		France	Italy	Poland	Romania	Spain
Physical health issues	Positive					
	Negative	More new physical pains: back pains, wrist pains or ocular pains.			More new physical pains: back pains, wrist pains or ocular pains.	
Monitoring and control over workers	Positive					
	Negative	Monitoring too "intrusive" for workers (in cases it exists).	Increase in monitor and control over workers.			
Available resources to telework / compensation for the costs of teleworking	Positive					
	Negative	Low percentages of workers benefitting from equipment delivered by the employer. (According to one union survey (UGICT CGT))				
Management challenge	Positive		Increase of trust between managers and workers and individual responsibility.			
	Negative	Difficulties in teams' management.				
New issues unveiled by the pandemic	Positive	Selection of employees allowed to telework: the pandemic unveiled that access to telework was possible also for occupations not previously considered to be teleworkable.				
	Negative	Selection of employees allowed to telework. Reduction of spaces for participation and negotiation.	Strengthening of gender inequalities.	Lack of social contacts and feeling of isolation especially for women and parents of young kids. Selection of employees allowed to telework.		

From the problem to the solution: the role of social partners during the pandemic

The last comparative part is aimed to investigate how the different industrial relations systems reacted to the challenges and threats raised by the Covid-19 pandemic. Among the diverse comparative perspectives adopted, that one related to industrial relations' reaction is the hardest to be harmonized in a comparable framework as to the same pressure (the pandemic) correspond differentiated industrial relations systems characterized by diverse structures and coverages of collective bargaining and institutionalised roles of national social partners. Generally, the involvement of social partners in addressing the issues associated with the Covid-19 pandemic ranged from initiating some of the Covid-19 aid measures introduced at the national level, confirming a social dialogue orientation of the national industrial relations system (France and to a different extent also Spain and Italy) to a very little, or even marginal, involvement (such as Poland and Romania). More specifically to remote work, there was variation among countries in the extent to which collective bargaining was used to bring about important labour-related interventions. While in France, Spain and Italy the main national policies to combat Covid-19 were partly implemented through collective agreements, in Poland and Romania, where collective bargaining is traditionally less structured, the pandemic further highlighted the limitation of the collective instruments.

In Italy, an intensive collective bargaining activity has been carried out during the pandemic at both national and company level. The pandemic has radically changed not only the use and the forms of remote work at the workplace but also the relationships between social partners and the same concept of remote work. If before the pandemic, smart work was mainly perceived as a form of corporate welfare addressed to specific categories of workers, now it is a common need of workers and companies that cannot be neglected by social partners at the national level. Furthermore, with Covid-19 also the relationship between legislation and collective bargaining has found a new balance. If in the pre-Covid-19 the legislative source on agile work intentionally ignored the regulatory role of collective bargaining, after the Covid-19 outbreak it has been strongly revitalized in both public and private sectors. The two industrial relations practices reported in the Italian national study are clear examples of this new regulatory paradigm. National social partners not only got their strength back in regulating remote work issues within the industry-wide agreements but together within the Ministry of Labour they have been involved in defining the national guidelines on remote work at the national level. The new role assigned to social partners is not only formally defined but also concretely supported as the new Protocol on agile work explicitly provides for public financial incentives for those companies that regulate agile work through collective bargaining.

In France also collective bargaining played a crucial role in addressing the impact of the Covid-19 on remote work in terms of work organisation and quality of work. Even though apparently the French case formally represents the same destination reached by the Italian social partners, a common general regulatory framework on remote work, it expresses formally and substantially a different relationship between legislation and collective bargaining on remote work issues. Formally because while the Italian destination is a Tripartite agreement among the Government and the national social partners, the French arrival point is a cross-sectoral collective agreement revealing a different autonomy of social partners within the national arena of industrial relations. Substantially, because the role played in France by collective bargaining is not a novelty in the regulatory framework on remote work while in Italy seems to be a turning point of the relationship between legislation and collective bargaining. That said, the French social partners were much more committed to confirming and enriching the regulation on remote work than to giving collective bargaining formal recognition as a regulatory source. As a matter of fact, the cross-sectoral collective agreement is an updated version of the 2005 cross-sectoral collective agreement on telework with a view to introducing some supplementary instruments to face the new post-Covid-19 scenarios:

- first of all, social partners have confirmed and reinforced direct and representative participation processes when regulating remote work issues at the company level;

- a better regulation of frequency of telework in a way to ensure an adequate balance between on line and in presence work and avoid organisational disfunctions;
- inclusion of all risks related to remote work (isolation) and digital work in the company's mandatory risk assessment;
- a more structured training oriented not only to teleworkers and their rights (for example right to disconnect) but also to managers who are asked to adapt daily working activities to telework schemes.

With this regard, it should be pointed out, as stated in the French national report, that even though the current regulatory framework on telework seems “to be complete”, the impact of remote work on work organisation “is still uncertain” calling the decentralised collective bargaining to a more attention in its implementation of the national guidelines.

In response to the COVID-19 outbreak and subsequent lockdown, the Spanish Government introduced the Telework Legislation (Royal Decree Law 28/2020) in October 2020 to support and regulate the rapid growth of teleworkers in Spain and, also in this case, the role of social partners has not been marginal. Firstly, because the new legislation was enacted following considerable social dialogue between the Government, trade unions and employers' associations. Secondly, because the new legislation constantly refers to collective bargaining for its operative implementation and to solve some practical aspects, mostly related to health and safety, risk assessment and training. Moreover, the national social partners are not only committed to turning all the legislative provisions into practice but also, as emerged in the Spanish national report, are interested in aspects relating to telework that go beyond labour relations and reflect a wider perspective strictly coherent with the IRSmart view. Along with encouraging a more structured digital training and a corporate culture that respects personal time in the organisation of work, social partners, and scholars, pay particular attention to:

- the adaptation of housing to the needs of telework and the possible effects on the location of the population in the territory;
- the impact of telework on urban and regional transformation policies, both to readapt areas that may lose population or activity, and areas that may experience population growth, requiring new services, favouring a balanced evolution and growth of the different urban and rural areas in line with technological changes.

The analysis of the reactions of industrial relations to the growth of teleworking in Poland suffers from two obstacles. On the one side, the collective bargaining is structured on a company basis, whose scale and features – as stated in the Polish report – are “unknown” and, on the other side, the specific legislative reform on telework is still under discussion and with a little involvement of social partners. More in general, regulations created in Poland, which were supposed to minimize the impact of the COVID-19 pandemic on the labour market, highlighted many problems existing before, such as the bad economic position of entrepreneurs, the high rate of precarious employment, which does not guarantee stability, and the lack of social dialogue. In response to the draft bill on telework, the main trade unions' concerns refer to the psychosocial risks related to digital work (isolation), equipment costs and working time and its impact on work-life balance. It is worth emphasizing, as stated in the Polish report, how national trade unions are in favour of a regulatory process that is more in line with more structured industrial relations systems: a multi-employers collective agreement providing for common principles for teleworkers and standardized lump sum to cover all personal telework related costs (electricity, connection, equipment and digital tools).

As stressed by Eurofound³⁹, the part of policymaking which experienced disruptions due to the pandemic was the involvement of social partners in different areas of activity. In many cases, how governments responded to the pandemic had an impact on social dialogue, resulting in some countries in a freeze in social dialogue and to a deeper involvement of social partners in others. If France and Italy, and more moderately Spain, certainly represent clear examples of the latter scenario, Poland and Romania seem to belong to the first group of countries in which the Covid-19 outbreak does not seem to have altered the balance of power in the industrial relations arena. More specifically in Romania, as stated in the Romanian national report, the legislation on remote work *“proved to be flexible enough and adequate to respond”* to the Covid-19 challenges and, even though the legislative measures specifically introduced to combat Covid-19 effects have not fully used by employers and employees, all actors, included social partners, collaborated to allow the continuation of working activities during the pandemic. That said, it also true that, as stated in the Eurofound report, an initiative had been put forward by trade unions to modify the Law on Social Dialogue (Law 62/2011) to improve the involvement of social partners but this initiative came under attack by employer organisations, arguing as that the pandemic represents a threat to public health, further changes in the social environment must be kept to a minimum.

³⁹ Eurofound (2021). Changing priorities: The impact of COVID-19 on national policy agendas. <https://www.eurofound.europa.eu/hr/publications/article/2021/changing-priorities-the-impact-of-covid-19-on-national-policy-agendas>

3. Concluding remarks and policy implications