



Law, Technology and Labour

Edited by Emanuele Menegatti

ITALIAN LABOUR LAW E-STUDIES
ALMA MATER STUDIORUM - UNIVERSITÀ DI BOLOGNA

Editor

Emanuele Menegatti
Department of Sociology and Business Law
Alma Mater Studiorum – University of Bologna

ISBN: 9788854971080

This work is subject to copyright. This eBook is published and licensed through the University of Bologna services according to the Creative Commons Licenses CC BY-NC-SA 4.0 (Attribution, Non-Commercial, Share-Alike).

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Italian Labour Law e-Studies is an editorial collection related to the *Italian Labour Law e-Journal* (<https://illej.unibo.it/index>).

The e-book “*Law, Technology and Labour*” is the Vol. 1 of the editorial collection *Italian Labour Law e-Studies*.

Editorial Committee

Emanuele Menegatti (Editor-in-Chief), Edoardo Ales, Francesco Basenghi, Leonardo Battista, Mark Bell, Janice Bellace, Marco Biasi, Alessandro Boscati, Davide Casale, Massimiliano Delfino, Filip Dorsemont, Valeria Filì, Anthony Forsyth, Claudia Golino, José Manuel Gomez Munoz, Tamás Gyulavári, Attila Kun, Sylvaine Laulom, David Mangan, Franz Marhold, Anna Montanari, Alberto Pizzoferrato, Lukasz Pyzarczyk, Silvia Rainone, Riccardo Salomone, Claudia Schubert, Iacopo Senatori, Beryl ter Haar, Giovanni Zampini, Gaetano Zilio Grandi, Anna Zilli.

Editorial Policies

The eBook has been submitted to a peer review process.



**Co-funded by the
European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



EU LAW FOR ALGORITHM
JEAN MONNET MODULE



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DEPARTMENT OF
SOCIOLOGY AND BUSINESS LAW

The eBook has been published within the framework of the Jean Monnet Module “*EULA* – *EU Law for Algorithm*”, ERASMUS – LS (ERASMUS-JMO-2021-HEI-TCH-RSCH).

For more information on the project and related events, visit:
<https://site.unibo.it/eula/it>

Italian Labour Law e-Studies
Department of Sociology and Business Law
Strada Maggiore 45, Bologna (Italy)
Alma Mater Studiorum - University of Bologna
2023

Table of Contents

1	Introduction <i>Emanuele Menegatti</i>	9
2	Homecare and artificial intelligence: a European Human right perspective <i>Theo Antunes</i>	12
3	“Industry 5.0” and digital information at the workplace: reflections from Spain <i>Stefano Bini</i>	28
4	Tackling with Risks Regarding Employee’s Right to Privacy in Teleworking, Stemming from Surveillance Methods of Algorithmic Management <i>Yiğitcan Çankaya</i>	37
5	Artificial intelligence and personal data protection in the company: the role of workers’ representatives <i>Noelia de Torres Bóveda</i>	52
6	Platform workers’ earning capacity. A set of key variables. <i>Luigi Di Cataldo – Marta Basile</i>	67
7	The Chinese approach to platform work – current state of affairs and possible further developments in the labor law of the PRC <i>Piotr Grzebyk</i>	89
8	Does playing with time elasticity alter its quality? Concerns about technologically-induced existential alienation of workers <i>Eva Lacková</i>	104
9	Tools for contrasting violations of fundamental rights in the use of artificial intelligence <i>Daniela Lafratta - Francesca Pollicino</i>	116
10	All in one: the multiple functions of algorithmic management <i>Mariagrazia Lamannis</i>	128
11	AI-driven recruiting: A consideration on data protection- and anti-discrimination law <i>Friederike Malorny - Til Rieger</i>	141

12	Employee's right to disconnect in the era of progressive use of ICT and remote work <i>Kinga Moras-Olaś</i>	156
13	Trade Unions, Platform Work and Algorithms: a Difficult Relationship? <i>Gianluigi Pezzini</i>	167
14	European Legislation and AI information systems applicable to HRM <i>Alberto Pizzoferrato</i>	179
15	Individual and collective protection challenges in digital work: the case of crowdwork <i>Ilaria Purificato</i>	186
16	Technological evolution and labour law. Between 'sport' and 'entertainment': the e-sports <i>Fabrizia Santini – Roberto Pettinelli</i>	204
17	Inclusive Digital Workplaces for Persons with Disabilities <i>Carla Spinelli</i>	223
18	Working in the e-sports: a juridical analysis <i>Alberto Tampieri – Gianluigi Fioriglio</i>	232
19	Digital nomads' health and safety: the European perspective <i>Davide Tardivo</i>	246
20	Agency of artificial intelligence tools in defining working conditions: towards a research agenda on the individual employment contract <i>Zabra Yusufli</i>	261

Digital nomads' health and safety: the European perspective. Davide Tardivo*

1. From the “factory paradigm” to the “diffused workplace”. 2. The advent of “digital nomadism” as a radical form of remote working. 3. The short-circuit in the protections system: environmental risks and “non-predeterminable” places. 4. Is the employer responsible for OHS of employees working in a “non-predeterminable” place? 5. How to balance worker’s OHS and freedom to choose the workplace?

1. From the “factory paradigm” to the “diffused workplace”.

In the fight against Covid-19, Governments forced businesses to modify their organization to pursue at the same time a twofold objective: to preserve workers’ health and safety and to avoid the collapse of the economy resulting from the complete paralysis of productive activities.¹

Among the several measures listed by national² and supranational authorities³ to prevent the spread of the infection within the workplace, the implementation of different forms of

* Davide Tardivo is Researcher (RTD-A) in Labour law at Università degli Studi di Padova. E-mail: davide.tardivo@unipd.it

¹ During the period of the strictest confinement the Euro-area economy operated at between 25% to 30% below its capacity and in 2020 registered a contraction by about 8,3%; see European Commission, *Summer 2020 Economic Forecast: An even deeper recession with wider divergences*, 7 July 2020; more recently European Commission, *The EU economy after COVID-19: implications for economic governance*, 19 October 2021, COM(2021)662.

² For a global overview over different national approaches see ILLEJ, *Special Issue: Covid-19 and Labour Law. A Global Review*, in *Italian Labour Law e-Journal*, 13, I, 2020; on the Italian context see Pessi R., Sigillò Massara G., Topo A. (eds.), *Ammortizzatori sociali, welfare e diritto del lavoro dell'emergenza*, Giappichelli, Turin, 2022.

³ See ILO, *COVID-19 and the world of work: Impact and policy responses*, 18 March 2020; ILO, *A policy framework for tackling the economic and social impact of the COVID-19 crisis*, May 2020.

remote working⁴ played a crucial role as an alternative to the conventional “working in-person” model.⁵

At the beginning of the pandemic, these two ways of fulfilling the employee’s performance (working in-presence and remote working) were traditionally considered antithetical to each other. The main reason lies in the current notion of “workplace”, forged during the industrial revolutions and inspired by the *factory paradigm* emerging in the organizational theories developed in that period.⁶ According to it, the core of the entire business organization is represented by the place (considered in its tangible dimension) where the firm is located: here the employer is used to organize the means of production, including the workforce.⁷ In other words, according to the *factory paradigm* the physical place works as an employer’s tool to coordinate the means of production and exercise its powers over them.

This led to an overlapping between the empirical place where the factory is based and the legal notion of the workplace.

At the supranational level, for instance, article 3, lett. c) of the ILO Convention no. 155/1981 on “*Occupational Safety and Health Convention*” states that the notion of “*workplace*” covers “*all places where workers need to be or to go by reason of their work*” but only if they are “*under the direct or indirect control of the employer*”.

Similarly, Recommendation no. 164/1981, pt. 10, lett. a) provides that employers shall “*to provide and maintain workplaces, machinery and equipment, and use work methods, which are as safe and without risk to health as is reasonably practicable*”. This means that the workplace “provided” by the employer is that place he can directly organize in compliance with “technical” obligations concerning the workplace design listed in pt. 3 of the Recommendation (structural features, lighting, ventilation, etc.).

⁴ In this paper the concept of “remote work” includes slightly different and sometimes overlapping definitions used by different countries like “*telework*”, “*work at home*” (“*home-based work*”), “*virtual work*”, “*hybrid work*”, but also “*telecommuting*” and “*smart-working*”, as listed by Eurofound, *Telework in the EU: Regulatory frameworks and recent updates*, 2022. All these definitions share a common characteristic: the use of ICT and devices like smartphones, tablets, laptops to work outside the employer’s premises. On the topic see also Eurofound, ILO, *Working anytime, anywhere: The effects on the world of work*, 2017.

⁵ ILO, *Teleworking arrangements during the COVID 19 crisis and beyond*, April 2021.

⁶ Described by Taylor F. W., *The principles of scientific management*, Harper & Brothers, 1911; see also Landes D. S., *The Unbound Prometheus*, Cambridge University Press, Cambridge, 1969; for an historical perspective see Finkin M. W., *Beclouded Work, Beclouded Workers in Historical Perspective*, in *Comparative Labor Law & Policy Journal*, 37, III, 2016, 603.

⁷ Apart from few exceptions like home workers or traveling workers. In the former case the performance is carried out in a place (usually worker’s home) which is in the exclusive worker’s disposability; in the latter in a place which is not disposable for either the employer or worker. These cases present an “organizational link” to the physical location where the enterprise is based: the traveling workers, for example, leave from there to deliver goods or there receive the material to sell or distribute. See Mazzotta O., *Diritto del lavoro*, Giuffrè, Milan, 2002, 386; Ichino P., *Il contratto di lavoro*, I, in A. Cicu, F. Messineo, P. Schlesinger (eds.), *Trattato di diritto civile e commerciale*, Giuffrè, Milan, 2000, 286.

This notion of workplace, which influenced the concept of subordination itself⁸, has been challenged by the advent of digitalization,⁹ which questioned the assumption that in order to use machinery or carry out administrative tasks, workers had necessarily to be present within the enterprise's premises. Digital devices, in fact, allow to fulfill many of these performances in places different than the factory.

In this context, characterized by the increasingly development of ICTs applied in the workplace, public policies against Covid acted as a multiplier, starting an unprecedented large-scale experiment in mass remote working implementation.

Prior to the pandemic only a small part of European workers was teleworking (on either regular or occasional basis), ranged from 30% or more in certain Countries (Denmark, the Netherlands, Sweden) to 10% or less in others (Italy, Czech Republic, Poland and Greece).¹⁰

By contrast, in 2020, as a consequence of the *lock-downs* imposed by Governments, around 34% of all employees in the EU started teleworking.¹¹ The most remarkable growth in teleworking occurred in those countries most affected by the infection and where teleworking was developed even before the pandemic: in Finland, close to 60% of employees switched to remote working; in Luxembourg, the Netherlands, Belgium, and Denmark over 50%, in Ireland, Austria, Italy, and Sweden around 40%. A marked increase was experienced also in countries that had a lower pre-pandemic practice with teleworking (like Bulgaria and Romania), even though with lower percentages.¹²

The indirect and unintended effect resulting from the restrictions and in particular from the forced implementation of several forms of remote working has been an organizational and cultural change in enterprises' functioning. It became clear, in fact, how both the stage of technological development and the evolution of workers' tasks (more focused on "knowledge" activities) make it possible to overcome the "factory paradigm" and embrace a different organizational paradigm based on the idea of the so-called "diffused workplace".

The main feature of this new model - intimately related to digitization and whose advent was predicted many years ago¹³ - is that it is no longer necessary to concentrate all the means of production at the same time in the same place to effectively coordinate them and achieve the productive aim. Thanks to the use of the Internet and digital devices, workers can carry

⁸ The notion of subordination commonly refers to a person who provides part of his time to the employer for fulfilling his performance in someone else's place (the factory), see De Luca Tamajo R., *Il tempo nel rapporto di lavoro*, in *Giornale di Diritto delle Relazioni Industriali*, 1986, 433; Magnani M., *I tempi e i luoghi del lavoro. L'uniformità non si addice al post-fordismo*, in *WP CSDLE "Massimo D'Antona".IT*, 404, 2019, 2.

⁹ On the evolution of remote working Nilles, J. M., *Telecommunications and organisational decentralization*, in *Transactions on Communications*, 23, 10, 1975, 1142–1147; Toffler A., *The Third Wave*, Bantam Books, New York, 1980; Messenger J. C. (ed.), *Telework in the 21st Century, An Evolutionary Perspective*, ILO Future of Work series, Edward Elgar-ILO, Cheltenham-Geneva; on Italian context among the others see Tiraboschi M., *Il lavoro agile tra legge e contrattazione collettiva: la tortuosa via italiana verso la modernizzazione del diritto del lavoro*, in *WP-CSDLE "Massimo D'Antona".IT*, 335, 2017; in general see Schwab K., *La quarta rivoluzione industriale*, Franco Angeli, Milan, 2016.

¹⁰ ILO, Eurofound, *Joint ILO-Eurofound report, Working anytime, anywhere: the effects on the world of work*, 2019.

¹¹ Eurofound, *Telework and ICT-based mobile work: Flexible working in the digital age*, 2020. Further data are provided by European Commission, *Teleworkability and the COVID-19 crisis: A new digital divide?*, 2020.

¹² *Ibidem*.

¹³ Simitis S., *The Juridification of Labor Relations*, in *Comparative Labor Law*, 1986, VII, 141: "telework signals, despite its actual singularity, the transition to a new normality. The employment structures are ultimately no less radically modified than by industrialization".

out “remotely” many of the same tasks that previously they could carry out exclusively within the enterprise’s premises, without sacrificing productivity, which, on the contrary, in many cases came out increased.¹⁴

Therefore, in this perspective the organization is disarticulated into its most basic and not further divisible units, a sort of “organizational atoms” (represented by the employees and their devices), which are linked not by the physical place anymore, but by the ICTs.

2. The advent of “digital nomadism” as a radical form of remote working.

Remote work has not declined in the post pandemic. On the contrary, the interest in it considerably grew¹⁵. National legislations are encouraging its further development in order to increase flexibility in work arrangements.¹⁶ Trade unions and employer associations started the negotiations to review the European Framework Agreement of 2002.¹⁷ Companies are now used to include it among the “benefits” offered to employees in recruitment and retention campaigns.

This trend allowed particularly “radical” versions of remote working to consolidate and further develop if compared to the past. One of them is the so-called “digital nomadism”, whose origin dates back to a time well before the pandemic.

The definition of “digital nomad” appeared in 1997 as the title of Makimoto and Manners’ book.¹⁸ The authors argued that the inborn human need to move and travel,¹⁹ along with technological development (through the Internet and the progressive miniaturization of mobile devices) would lead to the creation of new communities of traveling workers, who are capable of bringing “*the facilities of home and offices in their pockets*”.

So, digital nomads act within the employer’s organization as ‘organizational atoms’ located in different places worldwide but connected to it through digital devices and company’s rules (on-call hours, obligation to return to company premises if called back, etc.).²⁰ In fact, according to one of the most recent definitions, they are knowledge workers from different countries (not only Western countries) and different ages²¹ “*who embrace a location-independent,*

¹⁴ European Commission, nt. (11); see also Choudhury P., *Our Work-from-Anywhere Future, Best practices for all-remote organizations*, in *Harvard Business Review*, November-December 2020.

¹⁵ About the ‘legacy’ of the pandemic on remote working regulation and functions see Brollo, *Lavoro agile per i lavoratori fragili: lezioni dalla pandemia*, in *Argomenti di Diritto del Lavoro*, 2022, III, 405; Caruso B., *Tra lasciti e rovine della pandemia: più o meno smart working?*, in *Rivista Italiana di Diritto del Lavoro*, 2020, II, 215.

¹⁶ Eurofound, nt. (4), 10.

¹⁷ On 28 June 2022, the European social partners signed a joint *2022-2024 Work Programme of European Social Dialogue*, that includes negotiations on legally binding measures to regulate telework.

¹⁸ Makimoto T., Manners D., *Digital nomad*, Wiley, New York, 1997.

¹⁹ From a different perspective see also Bauman Z., *La società dell’incertezza*, Il Mulino, Bologna, 1999.

²⁰ Richards G., *The new global nomads: youth travel in a globalizing world*, in *Tourism Recreation Research*, 40, III, 2015, 340-352.

²¹ According to Macinelli F., *Digital nomads: freedom, responsibility and the neoliberal order*, in *Information Technology & Tourism*, 22, 2020, 425: “Research participants came from advanced capitalist countries (the United States, the UK and Europe), with the exception of a Chinese participant who had studied in the US. Although online observations suggest that digital nomadism is not bound to “Western countries” per se, all the interviewees held “strong” passports and explicitly described their passports as

*technology-enabled lifestyle that allows them to travel and work anywhere in the internet-connected world”.*²² In other words, “*a new lifestyle of leisure travel enabled by digital work, allowing them to earn a living while traveling as a way of life*”.²³

They differ from “*regular remote workers*”, who usually stay in one place or shuttle back and forth between their home or their second house, because they travel different countries around the World, and within the same country different places, while working.²⁴

This leads to place digital nomads in a peculiar position within the categorization of remote workers provided by the ILO and Eurofound, which is based on two factors: their place of work (home, office or another location) and the frequency of their working activity outside the employer’s premises. Looking at these two factors, the following groups were identified: *i*) regular home-based teleworkers; *ii*) occasional teleworkers (with mid-to-low mobility); and *iii*) high mobile teleworkers (with high frequency of working in various places, including working from home).

Digital nomads could be included among the “high mobile teleworkers”, even though they are characterized as having a much more tenuous connection to “home” compared to traditional teleworkers, since they often do not have a fixed domicile in the country/region where the firm is based.

Just as happened with the remote working in general, the advent of the paradigm of “diffused workplace” greatly supported also the development of the digital nomadism, attracting the interest of both public Authorities and collective actors.

National governments and local authorities, for example, have realized that attracting these workers, who are also “consumers” (often with a middle-upper income), could support the development of those local economies based on tourism. For those places this could represent an answer not only to the considerable damages suffered because of the pandemic, but also to those negative phenomena like depopulation related to their peculiar position (e.g., mountain territories), or to the absence of main services (e.g., rural villages) or again to the peculiar lifestyle they ask to adopt (one of the most famous cases is Venice, where mobility and the access to public services are peculiar).

In other words, digital nomads are seen by public authorities as workers who invest their time and money in local economies, without taking local jobs, but on the contrary building bridges with local communities and their knowledge workers. In other words, a win-win

facilitating their mobility strategies. Although, their income varied because of age and status differences, they could all be considered middle-class individuals, meaning that in their country of origin they lived a comfortable life, with stable housing, educational opportunities and disposable income for travel and leisure. All participants except one held a university degree. At the time of the interviews, they had traveled between 5 months and 8 years (with an average duration of 2 years for the whole group). Many of them had no permanent residence in their home country, where their only roots were the presence of relatives and a storage space where they kept some of their belongings. Most of them envisioned their mobility choice as permanent, although, during the course of my study, a few participants settled down, either returning to their country of origin or opting for an expatriate life in Europe or South-East Asia. This finding suggests that this form of mobility might evolve into migration, likely toward lower-cost destinations. My participants described themselves as “slow travelers” and moved seasonally between 3–5 destinations a year, the length of their stay largely determined by visa regimes (...) Those with advanced computing skills, such as programmers or web designers, had an easy transition to remote work”.

²² Everson M., King S., Ockels C., *Your Company Needs a Digital Nomad Policy*, in *Harvard Business Review*, 12 July 2021.

²³ Schlagwein D., *The history of digital nomadism*, in *International Workshop on the Changing Nature of Work*, 2018, 1-5.

²⁴ According to Macinelli F., nt. (19), 418.

situation, which is the opposite of the so-called “telemigration” of companies, where corporations remotely hire employees from cheaper-salaries countries taking jobs away from local workforce.²⁵

So, during the Covid-19 pandemic many countries began offering specific visas for digital nomads (tropical destinations like Costa Rica, Mexico, Ecuador; beautiful islands as St. Lucia, Barbados, the Seychelles; but also, northern countries like Estonia, Iceland, Norway).²⁶ Other countries, including several European Union members (like Czech Republic, Germany and Spain) and many Southeast Asian countries (as Thailand, Indonesia), expanded their existing short-term work visas. Portugal, for example, offers a two-year renewable residence visa for workers who can prove they work remotely for the length of their stay. On March 2022, Italy as well introduced a special visa for “digital nomads”, easier to obtain than traditional visas and residence permits for work purposes,²⁷ introducing also a legal definition of “digital nomads”: “*third-country citizens who carry out highly skilled jobs through the use of technological devices that enable them to work remotely, either independently or for an enterprise, including one that is not resident in the territory of the Italian Republic*”.²⁸

As mentioned, the interest in this phenomenon is also growing between private actors. A growing number of companies are offering “remote job” positions, coupled with the option to “work from anywhere”: no matter where, whether at home or abroad. Companies like Zapier, GitLab, and Doist, have embraced a total remote working model, abandoning entirely the traditional offices. Others, like Shopify, decided to maintain physical office locations, while ensuring, however, the primacy of remote work. Still others are testing remote hybrid models, allowing remote work only for certain roles or (as Google announced in 2021) allowing annual periods of work from anywhere.

Without doubt, the combined effect of both public and private policies will support the growth expected for digital nomadism. Although there are no certain data, someone argues that there are currently about 35 million digital nomads worldwide (including self-employed and employees) and that by 2035 this number could rise to over a billion.²⁹

The progressive spread of such policies makes it possible to distinguish within the category of “remote work” two typologies additional to those listed by the ILO-Eurofound report, especially having regard to the place of performance.

First, “*remote work from a predetermined or predeterminable place*”. This hypothesis occurs when the employer knows the exact place where the worker will perform his tasks (in this case we have a “predetermined” place), or at least its characteristics of risks for his occupational health and safety (OHS) (in this case we have a “predeterminable” place).

Second, “*remote work in a non-predeterminable place*”. This case happens when the employer does not previously know the place where the employee will fulfill his performance, because

²⁵ Baldwin R., *The Globotics Upheaval: Globalization, Robotics and the Future of Work*, Oxford University Press, Oxford, 2019.

²⁶ For a detailed list see Choudhury P., *How “Digital Nomad” Visas Can Boost Local Economies*, in *Harvard Business Review*, 27 May 2022.

²⁷ See article 6-*quinques*, par. 1, lett. a), Law Decree no. 4/2022 that modifies article 27 Legislative Decree no. 286/1998.

²⁸ Article 27, par 1-*sexies* Legislative Decree no. 286/1998.

²⁹ See data at www.levels.io/future-of-digital-nomads.

the choice is completely left to the workers' discretion, who is not obliged to inform the employer in accordance to the company's policies.

3. The short-circuit in the protections system: environmental risks and “non-predeterminable” places.

As a special kind of remote work, digital nomadism shares with the other typologies of work outside the employer's premises many positive aspects for individuals and organizations, but also several risks, especially for workers' health and safety.

Among the strengths, leaving aside the positive result achieved against Covid-19, remote work, as well as digital nomadism, are proven to be organizational models which increase the productivity of individuals and organizations as a whole, providing more flexibility and opportunities to enhance work-life balance, and in general ensuring an improvement of the well-being at work.³⁰

With regard to the risks to which digital nomads are exposed, they essentially overlap with those affecting the other categories of remote workers. Namely, studies and the literature³¹ define among the others: *i*) ergonomic issues (e.g., musculoskeletal issues, eye fatigue, etc.) in the absence of proper office equipment and furniture; *ii*) pervasiveness of information and communications technologies in employee's privacy; *iii*) blurring boundaries between work and private life, at the risk of developing workaholism and work-life conflicts; *iv*) isolation, detachment from colleagues and the organization itself; *v*) the proper functioning of digital devices assigned by the employer.

In general, the duty to protect the occupational health and safety of the employees (including remote workers) requires the employer to evaluate “*all these risks*” and adopt every proper measure to eliminate them or reduce their impact.³²

Specific provisions were introduced to face some of the aforementioned risks. For instance, to prevent isolation, the worker is required at least periodically to go to the company's premises.³³ Work-life conflicts can be managed looking at the existing working

³⁰ Eurofound, ILO, nt. (10), 33.

³¹ Eurofound, *Telework and ICT-based mobile work: Flexible working in the digital age*, 2020; EU-OSHA, *Telework and health risks in the context of the COVID-19 pandemic: Evidence from the field and policy implications*, 2021; Oakman, J., Kinsman, N., Stuckey, R., Graham, M., Weale, V., *A rapid review of mental and physical health effects of working at home: How do we optimise health?*, in *BMC Public Health*, 20, 1, 2020, 1825; see also Pelusi, L. M., *La disciplina di salute e sicurezza applicabile al lavoro agile*, in *Diritto delle Relazioni Industriali*, 2017, IV, 1041; Peruzzi, M., *Sicurezza e agilità: quale tutela per lo smart worker?*, in *Diritto della Sicurezza sul Lavoro*, 2017, I, 8; Maio, V., *La tutela della sicurezza, salute e socialità nel telelavoro*, in Persiani, M., Lepore, M., (eds.), *Il nuovo diritto della sicurezza sul lavoro*, Utet, Torino, 98; Pascucci, P., *Note sul futuro del lavoro salubre e sicuro... e sulle norme sulla sicurezza di rider e co.*, in *Diritto della Sicurezza sul Lavoro*, 2019, I, 37; Pessi, R., Fabozzi, R., *Gli obblighi del datore di lavoro in materia di salute e sicurezza*, in Fiorillo, L., Perulli, A., (eds.), *Il jobs act del lavoro autonomo e del lavoro agile*, Giappichelli, Torino, 2018, 227.

³² Article 6, par 2, lett. b) of Framework Directive states that “*the employer shall implement the measures (...) on the basis of the following general principles of prevention: (a) avoiding risks; (b) evaluating the risks which cannot be avoided*”.

³³ In Italy, see Article 18, par 1, Law no. 81/2017.

time legislation, the right to disconnect, as well as limitations on employer controls over employee's activity and privacy can be derived by the GDPR and national existing rules.³⁴

On the other hand, the risks related to the good functioning of digital devices or to ergonomic issues seem to be easy to solve even for remote workers, including digital nomads, through proper equipment provided by the employer.

Nevertheless, there is a kind of risks particularly challenging to address and solve in the case of digital nomads: the so-called "environmental risks". They are those risks related to and arising from the characteristics of the physical place in which the employee decides to work and that must be evaluated by the employer in the risk assessment process.

We refer, for example, to the high probability of contracting diseases (e.g., malaria, or tropical diseases) or of being kidnapped or yet to become a victim of terrorist attacks, endemic crime, wildlife, natural events in specific areas (tornadoes, volcanoes, earthquakes, etc.). They should also be considered risks deriving from the high exposure to sunlight or from the stay in an unhealthy place, because of the heavy pollution or spillage of toxic material, or again risks arising from the lack of adequate medical assistance or infrastructures, transportation, and so on.

The question arises because, considering the case of a 'regular' worker (not a remote worker) sent on an overseas assignment, the case law of both common law³⁵ and civil law³⁶ countries confirm, also in the light of the provisions of the Framework Directive 89/389/EEC, that the employer must assess these risks when sending workers abroad, and must observe all further obligations, such as the provision of individual and collective protective equipment, education, training and information, etc.

If compared to remote workers, however, these cases are slightly different: these are workers still working abroad (like digital nomads) but sent in that specific place at the direct order of the employer himself. In these cases, therefore, although the physical place is not in the disposal of the employer, he knows the exact place/region where the employee will perform his service or at least he knows the hazard characteristics of the place where the

³⁴ See Pisani C., Proia G., Topo A., *Privacy e lavoro. La circolazione dei dati personali e i controlli nel rapporto di lavoro*, Giuffrè, Milan, 2022.

³⁵ In the case *Palfrey v Ark Offshore Ltd.*, England and Wales High Court, 2001 an employee, Mr. Palfrey, travelling to West Africa to work on an oil rig contracted a fatal malarial infection. He was informed by his employer that he did not need to be concerned about the risk of malaria considering the workplace was an oil rig. So, Mr. Palfrey took no anti-malarial medication before or during the trip but during the travel to the oil rig he slept on an island where he was bitten by a mosquito and contracted malaria, which became fatal. The High Court found a failure on the employer to take reasonable care to ensure the safety of the employee, because it was supposed to cover also the travel to and from the oil rig.

In another case *Durnford v Western Atlas International Inc.*, England and Wales High Court, 2003, an employee suffered a disc slip due to an improper minibus provided by his employer to transport him to the third-party site where he was working while abroad. The court found that the employer was liable because it had made the employee travel in unsafe conditions, exposing him to a foreseeable risk of suffering an injury.

³⁶ The Italian Cassazione civile, lav., May 29, 1990, n. 5002 found the employer responsible for the malaria contracted by an employee in Cameroon because he did not prove to have adopted every possible measure to prevent the employee from the infection, even though he knew that such humid region was the natural "habitat" of the anopheles; see also Cassazione civile, lav., March 22, 2002, n. 4129 found the employer (a firm specialized in geological research) was liable for damages suffered by an industrial expert sent in Ethiopia to carry out geological surveys who had fallen victim to kidnapping by a group of guerrillas. The employer, although aware of the dangerous situation in the area, had not provide the necessary preventive measures.

employee has been sent. For this reason, he can usefully assess the risks and, consequently, manage it, by informing and training the employee, as well as he can (and indeed he must) take all appropriate preventive measures.

This is why the assessment of “environmental risks” in the case of digital nomads becomes particularly challenging. Especially when they have policies that leave to their total discretion to choose the place where to work, without informing in advance the employer, it is impossible to fulfill the duty to evaluate all the risks, especially those arising from the environment chosen by the employee to work in. In addition, there would also be no possibility of ensuring that the risk assessment is always kept updated, since the worker could change the place of performance without prior notice to the employer.

In other words, in this case it is impossible for the employer to assess the environmental risks, and to properly manage them, also by training and informing in advance the employee who plans to travel to a particular place abroad to work. The employer, indeed, does not know the precise city or region, nor even the general risk characteristics of the chosen place.

This leads to the question of whether in the case of digital nomads (especially those who work in “non-predeterminable” places) the employer’s duty to protect employees’ OHS has the same content if compared to the one concerning workers sent abroad by the employer himself (who work in “predetermined” places) or whether it suffers mitigations in favor of the employer, as argued by someone³⁷ and decided by certain Countries,³⁸ even charging on remote workers part of the risk assessment activity.³⁹

4. Is the employer responsible for OHS of employees working in a “non-predeterminable” place?

At international level, there is no legal provision that explicitly answers this question and in general that addresses the rights and duties of employers and remote workers (nor even digital nomads) concerning OHS.

Nevertheless, it seems important to focus the attention on supranational legal sources, in order to determine whether a general principle, that should inspire and constrain national legislations, can be derived.

³⁷ According to the International Employers Organization (IEO) “*the limited control by the employers over the preventive and security measures taken in a working environment different from the workplace, represents some challenges to OSH compliance. Certain exclusions may be needed given employers limited control over the remote working environment (...) Responsibilities on the employers may need to be adjusted depending on whether the work is performed at the employee’s home, or if it is performed elsewhere, including multiple locations (e.g. cafes, hotels)*”, see IOE Position Paper on Remote Work beyond Covid-19 September 2021, 14.

³⁸ Polish Labour Code 29, article 67/17 provides that the employer is specifically released from the duty to ensure and care for the condition of the building/rooms in which work is performed or the duty to ensure appropriate hygiene and sanitary facilities.

³⁹ In some countries official guidance provides clarifications on the division of responsibilities between employers and employees. For example, the Irish Health and Safety Authority, *Guidance on Working from Home for Employers and Employees*, October 2020 states that fire detection and firefighting equipment are the responsibility of the homeowner. Also, household electrical supply and equipment provided by the employee for example sockets, lighting, or heaters should also be checked by the employee.

If we look at the ILO sources, the most relevant is certainly the Convention no. 155/1981 on “*Occupational Safety and Health*”.

A literal interpretation of its provisions would argue in favor of the mitigation of the employer’s duty of safety toward remote workers. In fact, if the main aim of the Convention is to inspire national policies “*to prevent accidents and injury to health arising out of (...) hazards inherent in the working environment*” (article 4, par. 2), this “working environment” is restricted to the places “*where workers need to be or to go by reason of their work and which are under the direct or indirect control of the employer*” (article 3, par. 1, lett. c). So, it could be said that the places chosen by digital nomads do not fit into the concept of “working environment”/“workplace” under the Convention. This at least for three reasons. First, because they are not under “*the direct or indirect control of the employer*”. Second, because digital nomads do not “*need to be or to go [there] by reason of their work*”: the workers themselves have chosen that place without any employer’s order. Third, the possibility of limiting “*in part or in whole*” the application of the principles of the Convention is expressly provided by the Convention itself for “*limited categories of workers in respect of which there are particular difficulties*” (article 2, par. 2). These could certainly include digital nomads, with respect to whom there are the aforementioned “*particular difficulties*” in implementing OHS measures.

This interpretation, however, is not persuasive.

The possibility of limiting the application of the Convention established in article 2, par. 2 must be considered an exception of strict interpretation. The same Convention, in fact, proposes to be applied “*to all workers in the branches of economic activity covered*” (article 2, par. 1). For this purpose, it adopts wider definitions of “workers”⁴⁰ and “branches of economic activity”.⁴¹ So, considering that the Convention has been approved in 1981, when remote work was in its early stages, the lack of an explicit provision cannot support the exclusion of such phenomenon, which, on the contrary, can be encompassed within the broad definitions adopted by the Convention. Furthermore, in the case of digital nomads the “*particular difficulties*” are not objective, but derives by the choice of the parties to not predetermine the places where the employee will work.

More insights come from the analysis of the regulatory sources of the European Union, and in particular from the Framework Directive 89/391/EEC on “*Safety and Health at Work*” and the EU Framework Agreement on Telework of 2002.

Even though the Framework Directive does not explicitly consider remote work, an analysis of some of its provisions leads to the conclusion that it is fully applicable to remote workers, and thus to digital nomads as well. It follows that the employer must fulfill also in respect of the latter all the obligations introduced by the EU Framework Directive, first and foremost the obligation to carry out a comprehensive risk assessment. There is, therefore, no mitigation of the employer’s duty of safety toward digital nomadism, nor a limitation of liability.

The arguments in favor of this thesis are multiple.

⁴⁰ Article 3, par. 1, lett. b).

⁴¹ Article 3, par. 1, lett. a): “*the term branches of economic activity covers all branches in which workers are employed, including the public service*”.

First, the broad definition of “worker” in Article 3, which could certainly include digital nomads: in fact, it “*covers all employed persons, including public employees*”, without any limitation.⁴² Beneficiaries of protection are, therefore, all those who are parties to the employment relationship, regardless of the type of contract (e.g., full-time, part-time, permanent or fixed-term, apprenticeship, etc.). A fortiori, the simple manner in which the work activity is carried out (whether “in the presence” or “remotely”) cannot be a factor for exclusion.

Second, the broad scope that inspires the Directive, which in accordance to Article 1, par. 1 is “*to introduce measures to encourage improvements in the safety and health of workers at work*”. In this perspective, what is relevant to determine whether or not the OHS discipline is applicable is the execution of the performance, not the place or the way in which is carried out.

This definition should be read in light of the Directive's exclusion clause in Article 2 par. 2, which limits the possibility for states to disapply the principles of the Directive only to “*certain specific public service activities*”. It is, therefore, a far stricter exclusion clause than that contained in the ILO Convention, since it makes no reference to “*particular difficulties*”, but only to certain public services with particular duties (such as the army or the police).⁴³ Beyond these cases, all the activities should be entirely covered without any exceptions.

This expansive trend in the Directive field of application is also confirmed with regard to the employer's obligations in Section II. In particular, Article 5 identifies as the employer's first and crucial obligation “*to ensure the safety and health of workers in every aspect related to the work*” (article 5, par. 1). Undoubtedly among the “*aspects related to the work*” could fall a different way of carrying out the performance, like remote work or digital nomadism, which, moreover, is negotiated and authorized (through an individual agreement) by the employer himself.

Given the Directive also applies in full to digital nomads, in their regard the employer shall “*to take account of changing circumstances and aim to improve existing situations*” (Article 6, par. 1). In doing so he must conduct a new risk assessment (article 6, par. 2, lett. b) and adopt any consequent measures for this peculiar “group of workers”.⁴⁴

The fact that the employer must always evaluate in the risk assessment the physical place where the employee decides to carry out his work, and cannot instead disregard it, is confirmed by the same Article 6, par. 2, which includes among the “*general obligations on employers*” the duty to develop “*a coherent overall prevention policy*”. It shall cover - among the others - “*the influence of factors related to the working environment*”. In addition, Article 6, par. 3, lett. a) requires the employer to “*take into account the nature of the activities of the enterprise and/or establishment*” to the end of “*evaluate the risks to the safety and health of workers, inter alia in (...) the fitting-out of work place*”.

Such interpretation is confirmed by the provisions of the main EU regulation explicitly addressing telework: the EU Framework Agreement on Telework of 2002.

⁴² Article 3, par. 1, lett. a) “*any person employed by an employer, including trainees and apprentices but excluding domestic servants*”.

⁴³ Article 2, par. 2: “*This Directive shall not be applicable where characteristics peculiar to certain specific public service activities, such as the armed forces or the police, or to certain specific activities in the civil protection services inevitably conflict with it. In that event, the safety and health of workers must be ensured as far as possible in the light of the objectives of this Directive*”.

⁴⁴ Article 9, par. 1, lett. a) states: “*the employer shall: (a) be in possession of an assessment of the risks to safety and health at work, including those facing groups of workers exposed to particular risks;*”; Article 15 prescribes: “*particularly sensitive risk groups must be protected against the dangers which specifically affect them*”.

In order to “modernize work organization” and provide “a way for workers to reconcile work and social life and giving them greater autonomy in the accomplishment of their tasks”,⁴⁵ the social partners (ETUC, UNICE, UEAPME and CEEP) established “a general framework at the European level to be implemented by the members of the signatory parties in accordance with the national procedures and practices specific to management and labour”.

For our purposes, this agreement seems to be applicable to digital nomads too. In fact, digital nomadism is covered by the definition of “telework” set in Article 2: “a form of organizing 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”. Contrary to what is usually assumed, this definition excludes “telework” can be carried out only in the worker’s home or in any case in a single fixed location outside the company’s premises. In such definition of telework, in fact, there is no mention of location (it merely indicates “away from those premises”) and thus, telework may include several workplaces alternative to the employers’ premises, just as it happens in the case of digital nomadism.

This same definition, on the other hand, is very clear in establishing that the performance is carried out outside the company premises “on a regular basis”. Since there is no further specification and, therefore, the evaluation of what is “regular” becomes highly discretionary (one day a week? six months per year? etc.). A useful element to be interpreted could be the adoption of policies at company level or the conclusion of individual agreements. In fact, if the parties intended to introduce contractual regulation (bearing the related costs), it seems that they consider this kind of performance as a stable characteristic of the employer’s organization. In any event, this problem does not arise with regard to digital nomads, considering that in this case the regularity of the performance outside the company premises is self-evident.

Within the Agreement, the most relevant provision for our purposes is article 8 on “health and safety”, that must be read in the light of the principle of equal treatment enshrined in article 4.⁴⁶

Article 8 states that: “the employer is responsible for the protection of the occupational health and safety of the teleworker in accordance with Directive 89/391 and relevant daughter directives, national legislation and collective agreements”. The employer “informs the teleworker of the company’s policy on occupational health and safety, in particular requirements on visual display units”.

After this provision, in article 8, par. 3 it follows the more controversial rule which states: “in order to verify that the applicable health and safety provisions are correctly applied, the employer, workers’ representatives and/or relevant authorities have access to the telework place, within the limits of national legislation and collective agreements. If the teleworker is working at home, such access is subject to prior notification and his/her agreement”.

Advocates of the argument that the employer’s duty of safety with regard to remote workers (and even more so with respect to digital nomads) is mitigated and exempts him from conducting an assessment of “environmental risks”, base their reasoning on the fact

⁴⁵ Article 1.

⁴⁶ Article 4: “regarding employment conditions, teleworkers benefit from the same rights, guaranteed by applicable legislation and collective agreements, as comparable workers at the employers’ premises”.

that in many cases it is impossible for the employer to “*verify that the applicable health and safety provisions are correctly applied*”. In fact, neither the employer nor the workers’ representatives and/or competent authorities have access to the place chosen by the remote worker to work.⁴⁷

However, as is known, the second part of Article 8, par. 3 contradicts this assumption. It states that: “*if the teleworker is working at home, such access is subject to prior notification and his agreement*”. The fact that the employee works at home, therefore, is only one of the possible options considered by the rule (“*if the teleworker is working at home*”), and only in this case the access by the employer/employee’s representatives or other authorities would require his consent, given the constitutional protection of the domicile.

It follows that in other cases different than the worker’s home, such consent would not be needed and access would always be permitted (as in the case where the remote worker decides to work in public places), as long as within the limits of what national laws on private property provide (as in the case where the remote worker decides to work in a private place, the owner well could oppose his refusal of access). It is therefore corroborated by the same agreement that there are cases where access cannot take place, but nonetheless the directive is fully applied. to them.

Moreover, especially with regard to digital nomads the employer “access” could also take place “remotely”, (e.g., via video), allowing the employer to make the risk assessment, as it is suggested in some jurisdictions, like Ireland.⁴⁸

In sum, there is no evidence from the analysis of the ILO and above all EU legal framework to argue that the duty of safety is only partially applicable or the related employer’s liability is limited toward remote workers and digital nomads. The Framework Directive and every obligation therein finds full application to them.

5. How to balance worker’s OHS and freedom to choose the workplace?

The analysis on supranational and EU legal framework leads to reject the idea that the content of the employer’s duty on OHS is even reduced with respect to digital nomads, exempting him, for instance, from carrying out the risk assessment and from taking all the consequent measures (including worker information and training activities).

From this perspective, therefore, the position taken by some legal systems does not appear convincing when they mitigate the employer’s safety obligation or transferred part of the risk assessment activity on remote workers themselves. Even though these rules aim to fill the gap of regulation created by the impossibility for the employer to access to the place of performance, these same rules seem to violate the basic principle introduced by the

⁴⁷ In this direction also the recent French “*Accord national interprofessionnel du 26 novembre 2020 pour une mise en œuvre réussie du télétravail*”, point 3.4: “*Si les dispositions légales et conventionnelles relatives à la santé et à la sécurité au travail sont applicables aux salariés en télétravail, il doit être tenu compte du fait que l’employeur ne peut avoir une complète maîtrise du lieu dans lequel s’exerce le télétravail et de l’environnement qui relève de la sphère privée*”.

⁴⁸ Irish Health and Safety Authority, *Guidance on Working from Home for Employers and Employees*, October 2020.

Framework Directive, burdening workers with part of the employer's obligations, first of all the risk assessment.

So, the employer's choice to avoid knowing where the digital nomad will perform his job is a decision that the employer can certainly make to increase the flexibility of the employee, but it exposes both the employer to liability for the violation of safety obligations and the employee to risks not evaluated and with respect to which he has not been trained and informed.

In this regard, for example, the choice to carry out the risk assessment via video can be useful even though does not appear completely satisfactory, since it does not prevent all "environmental risks". On the one hand, when this activity is carried out the worker is already in the place to be assessed, and, therefore, is already exposed to those risks.

On the other hand, it also does not seem acceptable for the worker to be required to communicate the specific place to which he intends to travel from time to time: this, in fact, would end up frustrating the spirit of digital nomadism and reducing the overall level of protections by encouraging elusive reactions like the use of false autonomous work.

Then, the most reasonable solution could be the following: the parties in the individual agreement must necessarily identify the places in which the worker believes he might perform his work (based in a specific region or country in the world) and the categories of places in which he reserves the right to work, rather than the kind of environment (e.g., home, a second house or an apartment, public places, libraries, coworking spaces, etc.).

Such list cannot be considered exhaustive if the parties simply exclude certain categories of places (e.g., places open to the public) or limit the employee's choice to others (e.g., quiet places with an Internet connection), as some argue.⁴⁹ This should be considered a general list that would not allow the employer to carry out an effective assessment of "environmental risks": how to do if the place not open to the public, for example, was in an area with a high risk of contraction of tropical diseases? In such case, defining a generic list would not allow an effective risk assessment to be carried out.

This appears to be the solution that at the same time allows the employer to fulfill his duty of safety (while also keeping preventive measures up-to-date with respect to changing events in a certain area of the world listed by the employee as potential places where to work: e.g., outbreak of infection, armed conflict, etc.) and the worker to be able to take full advantage of the benefits of digital nomadism, without which, of course, this phenomenon would disappear.

In this perspective, in accordance with the employee's general obligation to cooperate under Article 13 Framework Directive and under article 8, par. 2 of the European Agreement,⁵⁰ the worker should be obliged to notify the employer in advance not any changes within the places already listed and known by the employer, but the modification with respect to the places listed in the contract.

Again, the content of the individual agreement becomes crucial in order not to expose the company to frequent and costly updates of the risk assessment and measures of

⁴⁹ Assolombarda, *Il lavoro agile (Smart Working) Aspetti giuslavoristici, assicurativi e di salute e sicurezza*, 14, 2019.

⁵⁰ "The teleworker applies these safety policies correctly".

prevention. In this view, for example, the parties could limit in a certain number per year the possibility for the worker to add new regions/places listed in the agreement.

If the worker breaches the agreement, or otherwise violates the company safety policies, it is reasonable to argue that the employer should withdraw from the agreement, ordering the employee to immediately return within the company's premises.⁵¹

In addition, the clause in Article 5, par 4 of the Framework Directive should be strengthened: "*this Directive shall not restrict the option of Member States to provide for the exclusion or the limitation of employers' responsibility where occurrences are due to unusual and unforeseeable circumstances, beyond the employers' control, or to exceptional events, the consequences of which could not have been avoided despite the exercise of all due care*". Given the particular manner in which the digital nomad's performance is carried out, and the reduced opportunity for the employer to control and intervene in it, the worker's violation can certainly constitute a "*unforeseeable circumstance, beyond the employer's control*", suitable to exclude the "*employer's responsibility*". In this regard, of course, national systems shall play a crucial role to introduce detailed rules that must to be inspired by these general principles.

On his side, the employer will only be able to enforce this clause, if he demonstrates that he has fulfilled all further obligations, and in particular those concerning training and information. Only a trained and informed worker, in fact, can effectively fulfill his obligations to cooperate in safety protection under Article 13 Framework Directive and Article 8 EU Agreement. The same Article 13, par. 1 states that the worker's obligations can only be fulfilled "*in accordance with his training and the instructions given by his employer*".

Once again, the individual contract becomes the primary tool for regulating different interests and balancing the worker's personal needs (the real basis for the development of digital nomadism) and the company's (which uses it as a tool for attracting talent and increasing productivity).

This makes it possible to prevent the worker's cooperation from turning into an unacceptable and unlawful transfer of part of the employer's obligations, first of all the risk assessment, to the worker.

⁵¹ Article 6, par. 3, lett. b) states that when the employer entrusts tasks to a worker, he must "*take into consideration the worker's capabilities as regards health and safety*": this means the employer is obliged to not grant the opportunity to perform as a digital nomad (and in case to withdraw from the agreement) to those workers who have shown their inclination to violate safety rules.