

Labor technology regulation of teleworking and digital disconnection in Colombia

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Abstract— Telework blurred the boundary between personal and work life, so this research seeks to study the effect of telework on the right to digital disconnection. This research aims to answer how telework affects the right to disconnection of teleworkers in Colombia? To describe the technological labor regulation of telework and digital disconnection in Colombia, a literature review was made to analyze the relationship between the use of time and working conditions in empirical studies on telework. As criteria, articles were searched in indexed journals in English since 1998, and they were searched in specialized databases using the following search descriptors: right to disconnect, double shift, double burden, telework, and home-based teleworkers. This review begins by describing telework from the Colombian regulation of Law 1221 of 2008, followed by empirical studies that show the benefits and challenges of telework in different countries. Subsequently, the right to digital disconnection, the technological control of the labor provision, and the main advances in the consolidation of this right are developed.

Keywords— *innovation, telework, digital disconnection, labor technology regulation.*

I. INTRODUCTION

Companies have adopted technologies to control their workers through devices used for work performance (such as cell phones and computers) that can be monitored to ensure their proper and authorized use. Some technologies used by companies are those that control the use of cell phones and company computers, surveillance with security cameras, the implementation of GPS in electronic devices or company vehicles, and biometric control for time control. However, the technological control of labor services must be proportional, in such a way that it respects the privacy and dignity of workers. In this respect, Directive 90/270 prohibits the use of monitoring devices without the knowledge of the workers [1].

Companies such as Three Square Market in Wisconsin implemented a pilot program to implant wireless radio frequency identification microchips in the hands of its workers, to allow them to access electronic devices of the company, make photocopies, store medical and professional data, etc.

This program evidences a violation of the worker's right to privacy since it cannot be deactivated until it is removed from the worker's hand [1]. Likewise, the Belgian company Newfusion also implemented a chip under the skin of its workers, which works as a control card that allows opening doors and does not allow locating or obtaining personal data of the worker, which is less invasive than the microchip of Three Square Market [2].

In addition, it is important to bear in mind that the right to rest, already legally recognized in Spain, implies exemption from disciplinary sanctions or non-compliance with labor obligations when workers do not answer their cell phones or e-mails outside working hours [1].

To describe telework, a literature review was made to analyze the relationship between the use of time and working conditions in empirical studies on telework.

As criteria, we searched for articles in indexed English-language journals since 1998, which were searched in specialized databases using the following search descriptors: right to disconnect, double shift, double burden, telework, and home-based teleworkers.

This review begins by describing telework from the Colombian regulation of Law 1221 of 2008, followed by empirical studies that show the benefits and challenges presented by telework in different countries.

Subsequently, it develops the right to digital disconnection, technological control of labor provision, and the main advances in the consolidation of this right.

II. METHODOLOGY

A literature review was developed following the systematic literature review protocol proposed by Kitchenham [3] and Sánchez-Gómez et. al [4].

The review responds to the research question about how teleworking affects the right to disconnection of teleworkers in Colombia?

Therefore, this research seeks to analyze the relationship between the use of time and working conditions in empirical studies on telework.

III. RESULTS

A. Telework in the world

Teleworking is paid work at a location other than the usual workplace, either at home or on the move [5], as remote work requires the support of ICTs [6]. According to Hill et. al [7], teleworking could make working hours more flexible, facilitating time management and a better work-life balance for employees, as well as increased productivity and better customer service for employers [8]. However, there are contrary views in the literature. Bergman and Gustafson [9] affirm that traveling for work deteriorates working conditions and family relationships. The lack of definition of time and space between home and work does not allow the employee to divide space and time between home and work [10] increasing their stress levels [11].

Teleworking at home started as a marginal form of work due to the lack of regulation, so it was common among managers and professionals who have less control and supervision [11]. In more recent times, in companies where teleworking is allowed, the control over employees is strong [12], because many employers are skeptical about its benefits [13] and are concerned about employees' misuse of time at home [14]. Employees are concerned about the invasion of their privacy by monitoring technology [15], loss of social interaction, and corporate malpractices that limit its movement.

Women do most of the unpaid work, so female teleworkers are limited by caregiving and their role as primary caregivers [16], with the tendency to work around the clock [17]. By Harris [18] women with dependent children have greater problems articulating their work and family life. This unpaid work for women is a social constraint for their labor force [19], because teleworking at home needs to be made more flexible to facilitate her dual role as a domestic worker and mother [20].

Empiric research in Finlandia as Nätti et. al [21] used the Finnish Time Use Survey, suggests that there are links between time use and the success of working at home. In this respect, it shows that unpaid work at home leads to a longer working day and a reduction in leisure time.

Empiric studies in the United Kingdom, as Harris [18] shows that 76% of home-based workers work more hours in their office than at home. There are also failures in communication with the employer, so that there is no clear distinction between work and home, causing difficulties in defining the schedule and its intensity. This leads to low satisfaction and high desertion among workers, who say they feel forgotten by their employers.

Wheatley [22] at UK, revealed that the work activities of teleworkers at home is 45 hours in men and 50 hours in women per week. Home-based female teleworkers work part-time for care work an average of 19.4 hours per week, while male teleworkers, regardless of their place of work, work full-time and perform fewer hours of care work. Among women teleworkers at home, most of them are mothers with dependent children who need teleworking, and who work double shifts, while men can choose to telework.

The search criteria for the documents were the language of English and Spanish, the publication year from 1996, the type of papers refereed and conference papers, and the books in Google Scholar. The descriptors used as keywords were: right to disconnect, double shift, double bourden, telework, and home-based teleworkers.

Papers were evaluated according to the prestige of the journal, publisher, and authors, as well as the consistency and relevance of the methodology and results to answer the proposed research question (see Table 1) [4].

TABLE I
SELECTION CRITERIA [4]

Criteria	Contribution	Description
Journal/Editorial	0-2 points	Prestige of the journal/editorial.
Authors	0-2 points	Prestige of the authors.
Consistency	0-2 points	Consistency of abstract.
Method	0-2 points	Methodological design
Results	0-2 points	Relevance of the results.
TOTAL	10 points	

The corpus of documents was classified by contribution level according to the selection criteria as discarded, low, medium, and high contribution (see Table 2). The final corpus includes 38 documents with a high level of contribution.

TABLE II
CORPUS

Contribution	Quantity	Percentage
Discarded	10	11.4%
Low	15	17%
Medium	25	28.4%
High	38	43.2%
TOTAL	88	100%

The final corpus was classified between two major topics, such as telework and the right to digital disconnection (see Figure 1). These issues were compared between Colombia and some developed countries with a legal tradition in technological labor regulation.

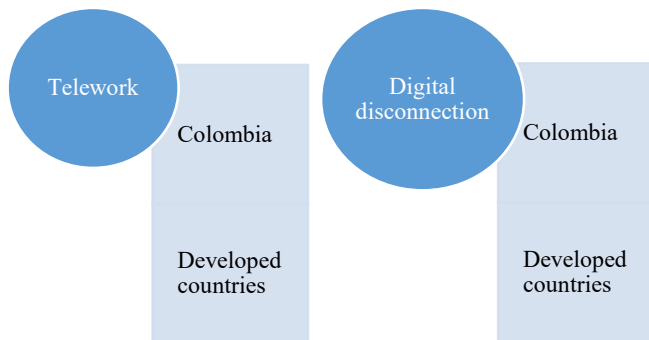


Fig. 1 Major topics.

Similar evidence was found in empirical studies in the United States. On the one hand, Wight and Raley [23], report that female home-based workers do more housework than those who work outside the home, while Fonner and Roloff [24] find that teleworking produces greater satisfaction than traditional face-to-face work, as those who telework more than 50% of the time feel greater satisfaction and management of the balance between work and personal life and lower levels of stress and distractions.

B. Telework in Colombia

In Colombia, teleworking is regulated by Law 1221 of 2008, which defines it in Article 2 as a form of labor organization for the provision of services or performance of paid work activities through information and communication technologies. Likewise, it recognizes the teleworker as the one who performs work activities outside the company in which he/she works using support the information and communication technologies [25].

However, Law 1221 of 2008 violates Articles 25 and 13 of the Constitution of Colombia, by excluding the limitation of the working day, by establishing in paragraph 1 of Article 6 that teleworkers are not subject to the rules on working hours, overtime, and night work [25]. In this regard, the limits of the working day are legally established, in the case of private sector workers, in Article 161 of the Substantive Labor Code [26] and for public servants in Article 33 of Decree 1042 of 1978 [27]. The following is an explanation of the violation of Articles 25 and 13 of the Colombian Constitution, based on the arguments of the unconstitutionality complaint.

In the first place, numeral 1 of Article 6 of Law 1221 of 2008 violates Article 25 of the Political Constitution, because, for the Constitutional Court in Judgment T-203/2000, the protection of labor in Article 25 includes the establishment of the maximum working day and the right to rest to guarantee the right to health and life of workers [28]. Likewise, in Judgment C-024/1998, the Court also stated that all employment relationships require maximum working hours and the corresponding rest periods [29]. Lastly, the Presidency of Colombia in Decree 884 of 2012 [30] extended for teleworkers the guarantees of the working day and overtime for public and private employees, as provided by Law 1221 of 2008. In this sense, this law also does not take into account the care responsibilities of women teleworkers, since from assuming a double working day in the normal they went to assume a double parallel working day in times of pandemic. This law excludes the teleworkers from the fixation of a maximum working day but ignores the conditions of women and mothers that many teleworkers assume in the double working day.

Secondly, the right to equality contemplated in Article 13 of the Constitution of Colombia is violated, since paragraph 1 of Article 6 of Law 1221 of 2008, excludes teleworkers from the minimum labor guarantees of working hours and overtime, guarantees enjoyed by other workers. In this regard, the Constitutional Court has mentioned:

- Judgment T-098 of 1994, states that discrimination is configured when the law makes an unequal and unjustified treatment to people in equal conditions, as is the case of excluding teleworkers from the ordinary

legal regime of workers [31]. Therefore, it is evident the discrimination that produces Law 1221 of 2008 on teleworkers, which is configured in the unjustified exclusion of the minimum labor guarantees to which they should access, especially women teleworkers by the care responsibilities they must assume in their homes.

- Judgment C-337 of 2011, the Court affirms that not all employment relationships must be treated equally by law. In this same judgment, it emphasizes that the freedom of legislative configuration is limited by the minimum labor guarantees, so it asks Congress to issue a new Labor Statute to ensure equal opportunities among workers, labor stability, and the primacy of reality [32]. In this sense, Law 1221 of 2008 should take into account the particularities of women teleworkers, to ensure the primacy of reality to promote decent working conditions in teleworkers.
- Judgment C-178 of 2014, the Court established that discrimination occurs when an "unreasonable distinction" is included, such as the exclusion of teleworkers from minimum labor guarantees [33]. In this regard, Law 1221 of 2008 not only discriminates against teleworkers in general but also puts additional burdens on women teleworkers, who assuming a double day are exposed to excessive workloads that the employer could impose on them, based on the express exclusion that has the defendant rule.
- Judgment T-254 of 2016, the Court established that teleworking is a new labor modality that should be considered as a "regulatory flexibilization measure" [34]. Equality condition that Law 1221 of 2008 should also guarantee to women teleworkers, allowing the establishment of flexible schedules that adapt to the care work they perform at home.

C. Right to digital disconnection in the world

- Right to disconnection as an adaptation of the right to rest: those who defend the idea that the right to disconnection is neither autonomous nor differentiated, explain that this right does not need any positivization. In other words, this right is a concretization of the classic right to rest, which is already recognized by law, and which has been adapted to the new technologies [35].
- Right to disconnection as an autonomous and differentiated right: Aleman defends the progress of the right to disconnection and explains the need for its positivization. However, it is not enough to legally recognize the limits of the working day and the minimum breaks during the working day, but it is also necessary to establish that outside working hours workers have no work obligations and that they can refuse to receive work outside working hours [36].

D. Right to digital disconnection in Colombia

- Right to disconnection as an adaptation of the right to rest: in Colombia, the right to rest is established in Article 53 of the Colombian Constitution, understood as a labor guarantee, which in the words of the Constitutional Court in judgments C-710 of 1996 and C-372 of 1998 respectively, allows the worker to have the physical and mental conditions to maintain efficiency in their work [37], protect their health, and attend to other tasks that allow their integral development [38]. Likewise, the right to rest is found in the Substantive Labor Code, in Article 167 as the distribution of working hours with a rest period that allows the distribution of the working day, in Article 167 as Sunday rest, in Article 177 as rest on holidays, in Article 181 as compensatory rest and in Article 186 as vacations [26].
- Right to disconnection as an autonomous and differentiated right: in Colombia, all labor relations must have maximum working hours and rest periods, which must be remunerated and previously established. Likewise, the Constitutional Court in this Judgment T-203 of 2000 established that the establishment of the maximum working day and the right to rest is an essential part of the protection of labor in Article 25 of the Colombian Constitution [28].

IV. CONCLUSIONS

Article 7 of the International Covenant on Economic, Social, and Cultural Rights (1966) recognizes the enjoyment of working conditions that guarantee rest, free time, and reasonable limitation of working hours. Likewise, ILO Convention 30 of 1930 establishes in Article 2 that working hours are understood to be those hours that the worker is at the disposal of the employer, not including breaks; and Article 3 states that working hours may not exceed 48 hours per week or 8 hours per day. To this legal framework, Visconti adds [39], by stating that the absence of regulation on the non-existent right to digital disconnection represents a lack of protection for workers in the face of disproportionate corporate decisions that have led to excessive connectivity outside working hours. The following are some of the advances in the right to digital disconnection in some European countries.

In Spain, the National Court in different rulings has declared null and void those corporate decisions aimed at forcing workers to remain connected outside working hours. For example, in one of its first rulings on the matter, Judgment 120 of 1997 declared null and void a company's instruction forcing its workers to stay connected to their cell phones outside working hours. Subsequently, in Judgment 205 of 2014, the Spanish Supreme Court declared null and void the clause of a contract that obliged the worker to receive work notifications to his cell phone and personal email, since it contained a consent defect and violated the right to the protection of personal data.

Additionally, in 2016 the Court of Castilla y León through the Judgment AS 2016/99 established that companies that use telework at home or remotely must implement time management policies, clarifying connection procedures, means of control,

and records to be able to address workers' complaints about excesses of the working day, safety and occupational health. Likewise, the STJUE Court in cases 3.10.2000, 21.2.2018 and Ville de Nivelles, determined that when there is technological availability time and the worker is willing to be located, this time is working time, even if the worker is at home and outside the working day, which implies the payment of overtime. However, when the worker is disconnected, this time is for rest and not for technological availability, therefore, he/she does not have any work obligation.

In France, workers have the right to disconnect and to regulate the use of digital devices, in the absence of an agreement, the employer must implement a policy defining the modalities of the right to disconnect and raise awareness among workers about the reasonable use of digital devices. However, the problem with the French regulation is that it does not provide for sanctions against companies that fail to comply with such policies [36], [40].

In Italy, Law 81/2017 in force since June 2017, regulated the treatment of the new working modalities. In this regard, it is possible to agree on face-to-face times and remote times through the use of technology for the development of the work activity. Such activity must establish the rest times and guarantee the disconnection of the worker from the work devices [41], [42].

Therefore, the agreements between the employee and the employer facilitate the implementation of policies that guarantee digital disconnection and become an obligation of the parties, to avoid work addiction during rest periods [41]. Measures such as the automatic shutdown of mail servers and the prohibition of sending mail between employees prevent psychosocial occupational hazards.

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REFERENCES

- [1] M. Á. Purcalla Bonilla, "Control tecnológico de la prestación laboral y derecho a la desconexión: claves teóricas y prácticas," *Anuario IET de Trabajo y Relaciones Laborales*, vol. 5, pp. 95–110, Dec. 2018, doi: 10.5565/rev/aiet.66.
- [2] C. San Martín Mazzucconi and M. Regina Redinha, "Derechos fundamentales y tecnologías innovadoras. Actas del III Encuentro Internacional sobre Transformaciones del Derecho del Trabajo Ibérico," 2017.
- [3] B. A. Kitchenham, E. Mendes, and G. H. Travassos, "Cross versus Within-Company Cost Estimation Studies: A Systematic Review," *IEEE Transactions on Software Engineering*, vol. 33, no. 5, pp. 316–329, May 2007, doi: 10.1109/TSE.2007.1001.
- [4] J. S. Sánchez-Gómez, M. C. Ramirez Cajiao, and K. Posada, "Trends of educational innovation in the higher education of Latin America," in *International*

Symposium on Project Approaches in Engineering Education, 2024.

- [5] D. E. Bailey and N. B. Kurland, "A review of telework research: findings, new directions, and lessons for the study of modern work," *J Organ Behav*, vol. 23, no. 4, pp. 383–400, Jun. 2002, doi: 10.1002/job.144.
- [6] M. M. Fitzer, "Managing from afar: Performance and rewards in a telecommuting environment," *Compens Benefits Rev*, vol. 29, no. 1, pp. 65–73, 1997.
- [7] E. J. Hill, M. Ferris, and V. Mårtinson, "Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life," *J Vocat Behav*, vol. 63, no. 2, pp. 220–241, Oct. 2003, doi: 10.1016/S0001-8791(03)00042-3.
- [8] P. J. Jackson and J. M. Van der Wielen, *Teleworking: international perspectives*. Routledge London, 1998.
- [9] A. Bergman and P. Gustafson, *Mobility and Technology in the Workplace*. Routledge, 2008. doi: 10.4324/9780203894354.
- [10] H. G. Shaw, A. S. Shaw, and H. Trache, "The homeworking revolution: Considering the property dimension," *Reg Stud*, vol. 34, no. 3, pp. 303–307, May 2000, doi: 10.1080/00343400050015140.
- [11] I. Hardill and A. Green, "Remote working—altering the spatial contours of work and home in the new economy," *New Technol Work Employ*, vol. 18, no. 3, pp. 212–222, Nov. 2003, doi: 10.1111/1468-005X.00122.
- [12] P. Peters, L. Den Dulk, and J. de Ruijter, "May I work from home? Views of the employment relationship reflected in line managers' telework attitudes in six financial-sector organizations," *Equality, Diversity, and Inclusion: An International Journal*, vol. 29, no. 5, pp. 517–531, 2010.
- [13] P. Pyöriä, "Managing telework: risks, fears and rules," *Management Research Review*, vol. 34, no. 4, pp. 386–399, 2011.
- [14] A. Felstead, N. Jewson, and S. Walters, *Changing places of work*, vol. 85. Palgrave Macmillan Basingstoke, 2005.
- [15] N. Ben Fairweather, "Surveillance in employment: The case of teleworking," in *Computer Ethics*, Routledge, 2017, pp. 381–391.
- [16] C. Sullivan and S. Lewis, "Home-based telework, gender, and the synchronization of work and family: perspectives of teleworkers and their co-residents," *Gend Work Organ*, vol. 8, no. 2, pp. 123–145, 2001.
- [17] N. J. de Freitas Armstrong, "Flexible work in the virtual workplace: discourses and implications of teleworking," *Global trends in flexible labour*, pp. 43–61, 1999.
- [18] L. Harris, "Home-based teleworking and the employment relationship: Managerial challenges and dilemmas," *Personnel review*, vol. 32, no. 4, pp. 422–437, 2003.
- [19] I. v. Staveren, "Post-Keynesianism meets feminist economics," *Cambridge J Econ*, vol. 34, no. 6, pp. 1123–1144, Nov. 2010, doi: 10.1093/cje/ben033.
- [20] C. Sullivan and J. Smithson, "Perspectives of homeworkers and their partners on working flexibility and gender equity," *The International Journal of Human Resource Management*, vol. 18, no. 3, pp. 448–461, 2007.
- [21] J. Nätti, M. Tammelin, T. Anttila, and S. Ojala, "Work at home and time use in Finland," *New Technol Work Employ*, vol. 26, no. 1, pp. 68–77, Mar. 2011, doi: 10.1111/j.1468-005X.2010.00258.x.
- [22] D. Wheatley, "Good to be home? Time-use and satisfaction levels among home-based teleworkers," *New Technol Work Employ*, vol. 27, no. 3, pp. 224–241, Nov. 2012, doi: 10.1111/j.1468-005X.2012.00289.x.
- [23] V. R. Wight and S. B. Raley, "When Home Becomes Work: Work and Family Time among Workers at Home," *Soc Indic Res*, vol. 93, no. 1, pp. 197–202, Aug. 2009, doi: 10.1007/s11205-008-9377-6.
- [24] K. L. Fonner and M. E. Roloff, "Why Teleworkers are More Satisfied with Their Jobs than are Office-Based Workers: When Less Contact is Beneficial," *Journal of Applied Communication Research*, vol. 38, no. 4, pp. 336–361, Nov. 2010, doi: 10.1080/00909882.2010.513998.
- [25] Congreso de Colombia, *Ley 1221 de 2008*. Colombia, 2008. Accessed: May 15, 2024. [Online]. Available: <http://www.suin-juriscal.gov.co/viewDocument.asp?ruta=Leyes/1675702>
- [26] Congreso de Colombia, *Código Sustantivo del Trabajo*. Colombia, 1951. Accessed: May 15, 2024. [Online]. Available: <http://www.suin-juriscal.gov.co/viewDocument.asp?ruta=Codigo/30019323>
- [27] Presidencia de Colombia, *Decreto 1042 de 1978*. Colombia, 1978. Accessed: May 15, 2024. [Online]. Available: <http://suin-juriscal.gov.co/viewDocument.asp?ruta=Decretos/1732444>
- [28] Corte Constitucional de Colombia, *Sentencia T-203 del 2000*. 2000. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/relatoria/2000/T-203-00.htm>
- [29] Corte Constitucional de Colombia, *Sentencia C-024 de 1998*. 1998. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/relatoria/1998/c-024-98.htm>
- [30] Presidencia de Colombia, *Decreto 884 del 2012*. Colombia, 2012. Accessed: May 15, 2024. [Online]. Available: <http://www.suin-juriscal.gov.co/viewDocument.asp?ruta=Decretos/1183842>

- [31] Corte Constitucional de Colombia, *Sentencia T-098 de 1994*. 1994. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/RELATORIA/1994/T-098-94.htm>
- [32] Corte Constitucional de Colombia, *Sentencia C-337 de 2011*. 2011. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/RELATORIA/2011/C-337-11.htm>
- [33] Corte Constitucional de Colombia, *Sentencia C-178 de 2014*. 2014. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/relatoria/2014/C-178-14.htm>
- [34] Corte Constitucional de Colombia, *Sentencia T-254 de 2016*. 2016. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/relatoria/2016/t-254-16.htm>
- [35] C. Molina Navarrete, “EL TIEMPO DE LOS DERECHOS EN UN MUNDO DIGITAL: ¿EXISTE UN NUEVO ‘DERECHO HUMANO A LA DESCONEJÓN’ DE LOS TRABAJADORES FUERA DE JORNADA?,” *Revista de la Facultad de Derecho de México*, vol. 67, no. 269, p. 891, Nov. 2017, doi: 10.22201/fder.24488933e.2017.269.62482.
- [36] F. A. Páez, “El derecho de desconexión digital: una aproximación conceptual, crítica y contextualizadora al hilo de la” *Loi Travail N° 2016-1088*,” *Trabajo y derecho: nueva revista de actualidad y relaciones laborales*, no. 30, pp. 12–33, 2017.
- [37] Corte Constitucional de Colombia, *Sentencia C-710 de 1996*. 1996. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/relatoria/1996/C-710-96.htm>
- [38] Corte Constitucional de Colombia, *Sentencia C-372 de 1998*. 1998. Accessed: May 15, 2024. [Online]. Available: <https://www.corteconstitucional.gov.co/relatoria/1998/C-372-98.htm>
- [39] E. E. T. Visconti, “La desconexión digital en el ámbito laboral: un deber empresarial y una nueva oportunidad de cambio para la negociación colectiva,” *Revista de información laboral*, no. 4, pp. 193–208, 2018.
- [40] P.-H. Cialti, “El derecho a la desconexión en Francia: ¿más de lo que parece?,” *Temas laborales: Revista andaluza de trabajo y bienestar social*, no. 137, pp. 163–181, 2017.
- [41] P. Charro Baena, “Cambios tecnológicos y tiempo de trabajo,” *III Encuentro Internacional sobre Transformaciones del Derecho del Trabajo Ibérico. Derechos fundamentales y tecnologías innovadoras*, 2017.
- [42] R. Di Meo, “Il diritto alla disconnessione nella prospettiva italiana e comparata,” *Labour & Law Issues*, vol. 3, no. 2, pp. 17–38, 2017.