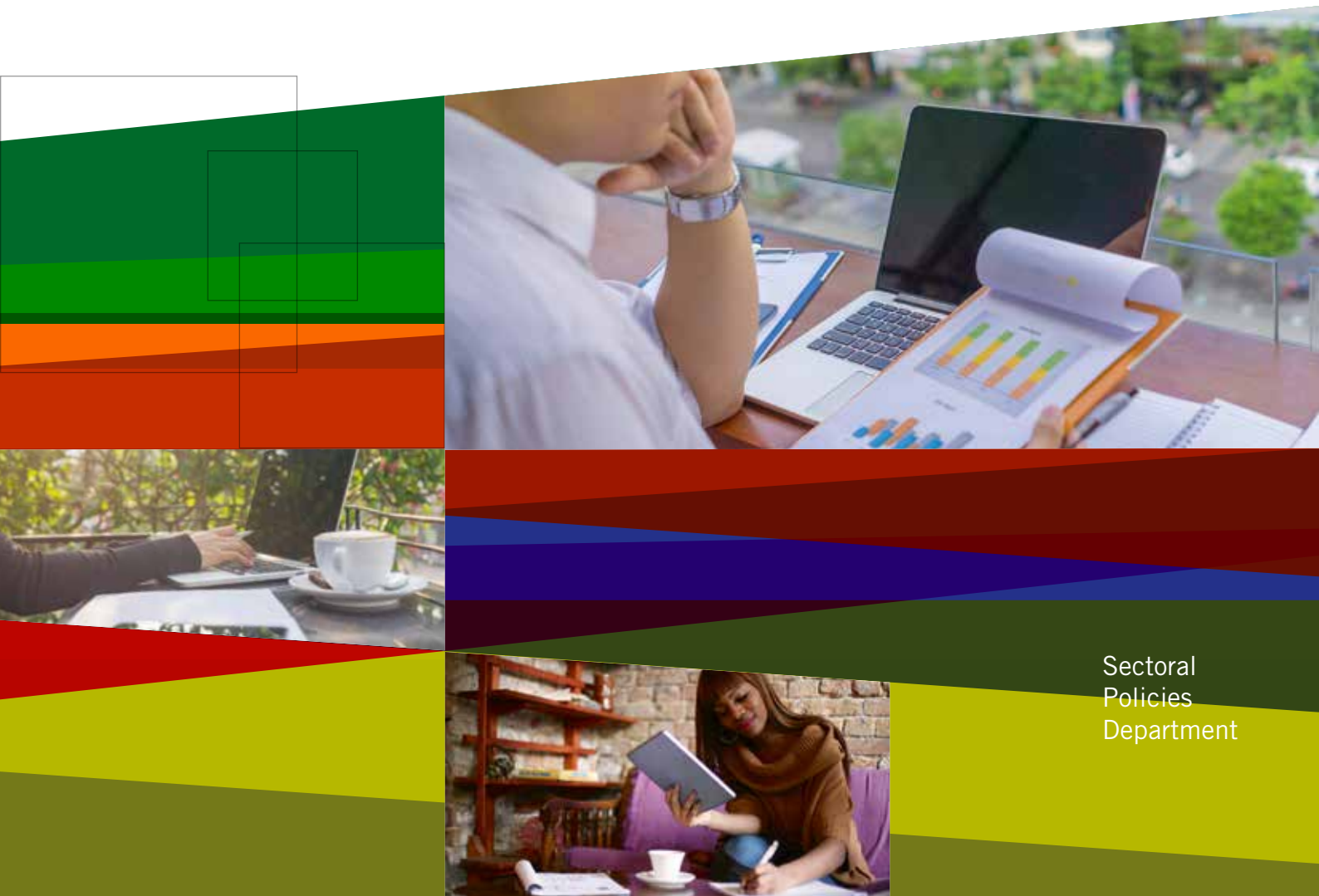


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Challenges and Opportunities of Teleworking for Workers and Employers in the ICTS and Financial Services Sectors

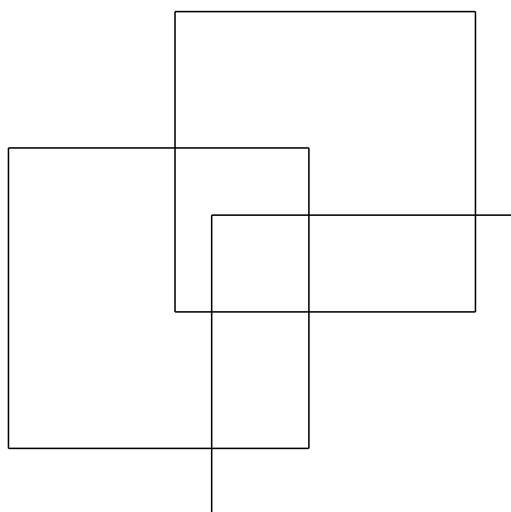


Sectoral
Policies
Department



Challenges and opportunities of teleworking for workers and employers in the ICTS and financial services sectors

**Issues Paper for the Global Dialogue Forum on the Challenges and
Opportunities of Teleworking for Workers and Employers in the ICTS
and Financial Services Sectors**
(Geneva, 24–26 October 2016)



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INTERNATIONAL LABOUR OFFICE, GENEVA

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Preface

This issues paper has been prepared by the International Labour Office as a basis for discussions at the Global Dialogue Forum on the Challenges and Opportunities of Teleworking for Workers and Employers in the Information and Communications Technology Services (ICTS) and Financial Services Sectors. At its 326th Session (March 2016), the ILO's Governing Body decided that the Forum would: be held from 24 to 26 October 2016; be composed of eight Employer and eight Worker participants, selected after consultations with their respective groups of the Governing Body; and be open to all interested governments, while representatives of certain intergovernmental and non-governmental organizations would be invited to attend as observers.¹ The purpose of the Forum is to allow tripartite participants to share their experiences of telework in the above sectors with a view to increasing their understanding of, and developing consensus on, the way forward with regard to its: (a) prevalence; (b) economic and social risks and benefits; and (c) employment relationships, work organization and professional development practices linked to, and their impacts on, the rights and protection of teleworkers, including those engaged in involuntary telework. Participants would also examine existing standards relevant to telework and consider how social dialogue could be harnessed to promote decent work in telework.

This Forum is part of the ILO's Sectoral Policies Programme, as defined by the ILO programme and budget, the aim of which is to assist governments, and employers' and workers' organizations, in developing their capacities to deal equitably and effectively with the social and labour problems of particular economic sectors. The programme also offers a means of alerting the ILO to specific sectoral social and labour issues, with its programme of tripartite meetings and forums also contributing to the ILO's strategic objectives. Such meetings bring together a cross section of Government, Employer and Worker representatives from countries that are prominent or have a strong interest in a given sector and the specific issue under discussion. In line with the ILO's strategic objectives, these meetings also aim to strengthen tripartism and to promote social dialogue at the international level.

¹ ILO: *Sectoral meetings held in 2015 and proposals for sectoral work in 2016–17*, Governing Body, 326th Session, March 2016, GB.326/POL/6.

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1. Introduction

1. Interest in the idea of telework first emerged with the oil crisis of the 1970s. As the cost of fuel rose rapidly, so too did the cost and hassle of the daily commute to and from work. In addition, concern about the future supply of oil was rising and whether its increased cost would become permanent. Telework was seen as a means around this, with individuals working from home or at a telecentre close to their home in order to avoid the high cost of fuel for commuting to work as well as for heating or cooling office premises. The oil crisis soon ended, but not the interest in telework, which was now promoted as a means of achieving other desirable goals for both business and workers, including enhancing work–life balance, increasing worker morale, and ensuring productivity improvements, among many others. Continuing advances in information and communication technologies (ICTs) and their ability to facilitate the performance of distributed work, often in remote geographical locations (including across borders) was a major driver in the growth of telework.
2. As noted in the Director-General’s Report to the 104th Session of the International Labour Conference, *The future of work centenary initiative*:

An increasingly globalized economy experiencing rapid and deep change under the impetus of technological transformations and a constant quest for increased competitiveness, and conditioned by an evolving policy agenda ... is generating major developments in the way that work and production are organized. ... With information and communication technologies also providing increased scope for remote working, new opportunities exist to reconcile professional and family responsibilities through more satisfactory and equitable work–life balance, with women potentially the principal beneficiaries. Here, too, there are concerns as well as hopes; a blurring of the spatial and temporal boundaries between work and the private sphere provokes disquiet in some quarters, and echoes of pre-industrial organizational forms. Processes of change that allow the individual to be more at home in their work, but also more at work in their home, could prove a mixed blessing for some. ¹

Nothing encapsulates those contradictory hopes and concerns more than telework.

3. The ability for people nowadays to work anywhere and anytime while remaining connected to and closely interacting with co-workers either at their employer’s main place of work or any other locations is made possible by far-reaching advances in ICTs. Location-independent work today has been made much easier and accessible to a wider pool of workers by such technological tools as enterprise groupware, virtual private networks, broadband Internet connections, conference calling, videoconferencing, virtual call centre and Voice over Internet Protocol (VoIP), cloud computing, and Wi-Fi, as well as powerful digital devices which have become ever more ubiquitous.
4. As such location-independent working grows, greater empowerment of workers engaged in telemediated work becomes ever more necessary to allow them to successfully perform their tasks where and when it suits them best. In turn, such an increase in remote working, mostly through telework and virtual teams, brings with it new challenges and opportunities for employers and workers alike. Work becomes less about where it is done and more about what it produces. This requires a rethinking of managerial and supervisory approaches to focus more on deliverables rather than on the direct control of work processes and workers’ time.

¹ ILO: Report of the Director-General to the International Labour Conference, 104th Session, 2015, Report I: *The future of work centenary initiative*, paras 62 and 70.

2. Defining telework: An obstacle course

5. While telework has been around since the early 1970s when Jack M. Nilles first coined the term,² even now no consensus exists regarding its exact definition. Different people use the concept in diverse ways, linking it to a wide range of work arrangements, including mobile work, work in any location outside the usually accepted work premises of the employer, work at a shared office centre or hub, and home-based work. Others apply the term to any distributed forms of ICT-enabled work, such as those in emerging activities related to the rapidly growing financial technology industry (more popularly known as FinTech) which fuses new ICT and financial services.
6. The definitional fragmentation is highlighted by the multitude of terms applied to the phenomenon. Telework is variously referred to as “telecommuting”, “work from home”, “e-work”, “virtual work”, “remote work”, “distance working”, “distributed work”, “workshifting” or “flexible working”. These terms describe underlying practices whose characteristics overlap but are less synonymous than assumed and therefore some of whose inclusion in telework numbers results in an overestimate of its prevalence.

2.1. An overview of the terminology and definitions of telework

7. Most scholars maintain that the term “telework” should only be applied to work carried out on a regular basis away from the recognized work premises of the employer for at least a day in the workweek. “Virtual workers”, on the other hand, should refer primarily to those who work away from the office on a full-time basis; virtual workers are in other words full-time teleworkers. It is similarly argued that “telework” should not be assumed to always be “flexible work”, although a lot of telework studies and commentary are often carried out from the perspective of flexible work arrangements. While working from a location outside the employer’s operational hub may indeed permit employees some flexibility, telework arrangements can vary in terms of structure and flexibility. Similarly, although “home work” is often used synonymously with telework and a majority of teleworkers may indeed work at/from home,³ the equivalence of these terms should not be assumed. And, while it is the term most often used interchangeably with telework, “telecommuting” is strictly speaking applicable only to work arrangements that enable workers to dispense with having to commute to their employer’s usual work premises at least part of the time. The lack of precision with which all these terms are often used creates a serious problem in determining what really is telework and therefore what to include statistically in its measurement.
8. Another key hurdle in defining – and therefore measuring – telework is that it is usually covered from the perspective of diverse disciplines, with findings and conclusions about it and its impact fragmented and dispersed across such fields as technology and information

² The official story of the “telework” phenomenon began in 1973 when rocket scientist Jack M. Nilles and his interdisciplinary team at the University of Southern California (USC) received a grant from the United States National Science Foundation to investigate “Development of (Public) Policy on the Telecommunications–Transport Tradeoff”. He later coined the words “telecommuting” and “telework” as a more concise substitute for the project title.

³ The term “work from home” is often used synonymously with telework (or “telecommuting”), but the equivalence of these terms should not be assumed. The use of the term “home work” can be a far more serious error because it confuses working from home via ICTs with traditional home work – industrial piece-rate production performed in the home, as specified under the Home Work Convention, 1996 (No. 177).

systems, logistics, operations management, real estate, organizational management and organizational behaviour, sociology, psychology, business continuity strategies and industrial relations, to mention just a few.

9. This definitional problem is not new; in 1990, for instance, the ILO highlighted the difficulty of finding a common definition for the concept, given the breadth of situations to which it was applied.⁴ The report noted that the term continued to go through a never-ending evolutionary process, extending its original meaning of electronic home-based work to include more complex forms covering a variety of flexi-place arrangements with different combinations of work in central offices, at customer sites, in satellite centres or at home. The growing constellation of communication networks and new forms of work made it difficult to have a common definition of telework, with some analysts identifying three main conceptual bases of organization, location and technology, and about 50 different definitions of the term, of which more than 60 per cent were based on a combination of two or more of those conceptual bases.
10. Since working remotely and the use of new technology invariably imply organizational changes, it seemed appropriate to define telework as: a form of work in which (a) work is performed in a location remote from central offices or production facilities, thus separating the worker from personal contact with co-workers there; and (b) new technology enables this separation by facilitating communication. Furthermore, telework could be performed “online” (with direct computer linkage) or “offline”, be organized individually or collectively, constitute all or part of the worker’s job, and be carried out by independent workers or employees.
11. Other definitions abound. Article 2 of the 2002 European Framework Agreement on Telework, concluded and signed by the European peak social partners, BusinessEurope (formerly UNICE), the European Association of Craft, Small and Medium-Sized Enterprises (UEAPME), the European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest (CEEP) and the European Trade Union Confederation (ETUC), held telework to be:

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.
12. The definition was left deliberately broad in order to cover different forms of telework. A 2010 European Foundation for the Improvement of Living and Working Conditions (Eurofound) report, *Telework in the European Union*,⁵ notes that it remains open to debate for the industrial relations actors in the Member States which type of telework meets these criteria and, in particular, what quantity of time the term “regular basis” refers to, as it could equally cover working away from the employer’s premises five days a week as well as one day a week or less, as long as it is performed on a regular basis. This definition has been used to implement the agreement in a number of EU Member States through their respective national guidelines or national-level collective agreements, while other Member States have created more precise definitions of their own, expanding on or dropping some of the criteria in the Framework Agreement’s definition.
13. The EU Framework Agreement is not at all prescriptive about the location of telework, but it entails a great deal of formality, typically requiring telework to be included in an

⁴ ILO: *Conditions of work digest: Telework*, Vol. 9, No. 1 (Geneva, 1990).

⁵ Eurofound: *Telework in the European Union* (Dublin, 2010), ref. EF/09/96/EN.

employee's employment contract. It also requires a degree of regularity in how often telework is undertaken.

14. The Australian Telework Advisory Committee (ATAC) takes an even broader approach to telework, specifying that telework is “a form of flexible working, which is enabled by ICT, and undertaken outside of a traditional office environment”.⁶ ATAC's literature review of telework and how different scholars define the term notes that some require a certain regularity of telework and a specific location; others were reasonably prescriptive, requiring that telework be carried out by paid employees from home at least one day per week, using communication technologies to do so; while still others considered home to be the usual location for telework, but that it could also occur from other locations.
15. Some other analysts, such as Messenger and Gschwind,⁷ note that highly flexible “cloud-based” work, accessible through smartphones and tablets from basically anywhere on the planet makes “telework” as originally understood sound old-fashioned, as it is associated with stationary computers, fixed telephones and fax machines – nothing like the devices used by today's and tomorrow's “digital nomads”. Building on Craipeau's work⁸ in which he describes telework as undergoing an “evolutionary” process in which such varied ICTs and the greater dispersion of Internet access virtualized work and made it accessible on smaller and more powerful devices like smartphones and tablets, Messenger and Gschwind propose their own framework of telework, spanning over three generations extending from the original *Home Office*, through the *Mobile Office* and then on to the *Virtual Office*.
16. The literature on first-generation telework is, unsurprisingly, concentrated on one mode of work, the Home Office, because computers and telephones of the time, thus first-generation ICTs, were incapable of enabling employee mobility while they worked. They also note that those first-generation studies had clear sectoral and geographical limits as, before telework spread to other industries, states and countries, the main objects of study were the 1970s' and 1980s' information industries on the West Coast of the United States where the jobs involved were flexible, commuting costs high and access to ICTs already prevalent.
17. Messenger and Gschwind note the difficulty of separating the first generation of telework from the second, the Mobile Office, as changes were incremental and took place at different stages across organizations, industries and countries, with technological advances as the principal driver separating the first from the second generation of telework. However, the Mobile Office broke with the classic dual spatial structure of work, as this could now increasingly be carried out at the employer's premises, at home and also at various locations in between. The authors cite Kurland and Bailey to underline that work had now become detached from space and could be performed “here, there, anywhere and anytime”.⁹
18. From this point in time, it only needed the fast growing dispersion of the Internet and World Wide Web access for the next generation of telework, the Virtual Office, to emerge.

⁶ Australian Telework Advisory Committee (ATAC): *Telework for Australian employees and businesses: Maximising the economic and social benefits of flexible working practices*, Report of the Australian Telework Advisory Committee to the Australian Government (2006).

⁷ J. Messenger and L. Gschwind: *Telework, new ICTs and their effects on working time and work-life balance*, an unpublished review of the telework literature (Geneva, ILO, 2015).

⁸ S. Craipeau: “Télétravail: le travail fluide”, in *Quaderni* (2010), pp. 107–120.

⁹ N.B Kurland and D.E. Bailey: “The advantages and challenges of working here, there, anywhere, and anytime”, in *Organizational Dynamics* (1999), Vol. 28, pp. 53–68.

Makimoto and Manners predicted in their 1997 *Digital Nomad* that the work of the future would be neither here nor there, but rather constantly on the move, and that access to the Internet via radio links and the shrinking of transistors, together with the inevitable fusion of information technologies and communications technologies, would generate the “industry’s ideal product”, which would be “both more and less than a laptop computer. It will do more communicating and less computing. And it will be much smaller and lighter than today’s laptops.”¹⁰

19. Given such definitional fragmentation of telework, a comprehensive analytical framework by Nicklin et al.¹¹ which incorporates and rationalizes the wide range of conceptual factors of telework used by various scholars is highly useful. This unified framework is captured in table 1:

Table 1. A model of factors to consider when defining telework

Factor	Considerations
Proportion: Part- to full-time	<i>Part-time teleworkers:</i> periodically perform job functions outside the established base of operations <i>Full-time teleworkers:</i> usually perform most or all job functions outside the established base of operations
Location: Fixed to mobile	<i>Fixed location:</i> employee predominantly works at one off-site location (e.g. home) <i>Mobile location:</i> employee can/does work in multiple locations outside the established base of operations. Note: field-based assignments would not be considered telework – they reflect a mobile assignment away from the established base of operations.
Schedule: Fixed to varied	<i>Fixed schedule:</i> employee has set days/hours that job functions will be performed away from established base of operations <i>Varied schedule:</i> days/hours that job functions are performed away from the established base of operations vary
Collaboration: Low to high	<i>Low collaboration:</i> employees require low interaction with co-workers at the established base of operations <i>High collaboration:</i> employees require high interaction with co-workers at the established base of operations
Synchrony: Serial to concurrent	<i>Serial:</i> employees’ interdependent tasks proceed <i>sequentially</i> (e.g. email, fax) <i>Concurrent:</i> employees’ interdependent tasks proceed <i>in union</i> (e.g. Conference call, videoconference)
Autonomy: Low to high	<i>Low autonomy:</i> employees have low choice over whether, when and how to telework <i>High autonomy:</i> employees have high choice over whether, when and how to telework

Source: J.M. Nicklin et al.: “Telecommuting: What? Why? When? and How?” in J. Lee (ed.): *The impact of ICT on work* (Singapore, Springer Science+Business Media, 2016), p. 46, table 3.2.

20. Note that in the view of Nicklin et al., the six factors of proportion, location, schedule, collaboration, synchrony and autonomy should be seen as continua with varying degrees of the extent to which telework occurs part-time or full-time, which can further vary depending on the day or the work being performed. Similarly, the extent to which telework occurs at

¹⁰ T. Makimoto and D. Manners: *Digital Nomad* (Chichester, 1997). Cited in Messenger and Gschwind, op. cit.

¹¹ J.M. Nicklin et al.: “Telecommuting: What? Why? When? and How?” in J. Lee (ed.): *The impact of ICT on work* (Singapore, Springer Science+Business Media, 2016), p. 46, table 3.2.

one location can vary (and likely will, as communication and collaboration technology continues to develop). For Nicklin et al. telework refers to the proportion of job function(s) performed by an employee away from both other employees and the organization's established physical base of operations, using various forms of ICT to maintain a virtual presence. Thus telework does not refer to: travelling assignments, work at multiple sites, on-site customer work, a total lack of virtual presence, or remote assignments including more than one employee.¹²

21. Given the possibility that telework can vary widely in terms of these six continua, it is possible that one way to define a teleworker is as any ICT-using employee working outside of the main office on at least one occasion each month to perform work-related tasks.
22. The definitional difficulties around telework are further complicated by the fact that those who classify themselves as non-teleworkers sometimes report taking work home or working at locations other than their usual work premises, at least some of the time. However, the literature is consistent regarding the fact that most individuals who identify themselves as teleworkers say they do so part time, and most employers initiate telework on a part-time basis. Nevertheless, telework is used in such a multifaceted way to meet today's workplace demands that there are a number of different types of telework arrangements to meet varying organizational and individual requirements.

2.2. Types of telework

23. There are several ways in which telework can be implemented. These include:
 - *Hot desking*, where the employee works from a remote location part or most of the time, and from the main office the rest of the time. When the employee is in the main office, they use a non-dedicated, non-permanent workspace assigned for use on an as-needed basis, as opposed to having a reserved office space that goes unused when teleworking.
 - *Hoteling*, which is similar to hot desking, but employees must reserve a space ahead of time.
 - *Telework centres*, which are facilities that provide workstations and other office facilities that employees from several organizations can use. This type of telework is viewed as useful because it can provide better technology than the home office, but is thought to be in decline as a result of widespread broadband, laptops and smartphones.
 - *Collaborative offices*, which are virtual work environments in which employees can work cooperatively from different locations using a computer network.
24. The 2006 ATAC report, referred to above, considers two additional types of teleworkers:
 - *Mobile teleworkers*, who spend at least ten hours per week doing work while away from their main place of employment, including via their mobile phone while on the move.

¹² *ibid.*

-
- *Day extenders*, who work from home during evenings or weekends on an ad hoc basis, usually as required to meet deadlines during busy periods. ¹³

3. Prevalence of telework around the world

25. Because telework is more about work organization than a form of employment or a new occupational category – even though it may facilitate both – few countries undertake systematic collection of official statistics to track and measure its development. As has also already been discussed, above, with the multitude of work and employment arrangements the term is applied to, mapping and determining the prevalence of telework is a difficult task that can be compared to measuring an elastic band – its length depends entirely on how far it is stretched. Some have also noted the difficulty of trying to make sense of the various government sources of work-from-home data, “The data goes in, but you can’t get it out.” ¹⁴
26. Most reports about the incidence of telework are mainly estimates – some of them very approximate – as they are often based primarily on academic or industry-led studies whose approaches vary widely in terms of sampling, population categories targeted, location, methodology and analytical rigour, and in terms of definitions and theoretical frameworks. Some, for instance, may count it as telework when an employee consults or responds to his email after returning home from the office. Such instances will then end up in the findings that purport to report the incidence of telework. All these factors affect the robustness, quality and reliability of such findings, but are often the only ones available from which to attempt to piece together some understanding of the prevalence of telework and its social and employment impacts. ¹⁵
27. In this regard, Messenger and Gschwind note how, for instance, in many surveys telework prevalence is measured as the percentage share of individuals who make use of telework within a larger population, with typical questions for home or mobile office telework asking whether someone worked at home for at least one day per week, or whether ICTs were used for work outside the employer’s premises. Other surveys ask for the amount of time with such questions as: “in a typical week how many hours do you spend working from home?”, while telework with new ICTs (virtual telework) is instead often measured with the help of a four- or five-point scale for frequency of use, typically ranging from “never” to “very often” or from “none” to “high”. Due to such wide variations, including in sample sizes, the type of targeted population, the location, the level of analysis and the methodology, even using the same definition and theoretical approach, the robustness and reliability of the findings of such studies are invariably uncertain. ¹⁶
28. The estimates presented in this paper therefore suffer from these limitations. They provide only a partial picture of the prevalence of telework, and even then only for a few developed countries for which any of the above studies have been carried out. They are often outdated and only indicative of the general situation of telework, not of what the situation might really

¹³ ATAC, op. cit. This is often referred to in the literature as “supplemental” telework because it supplements, rather than substitutes for, work in the office. Often this type of telework amounts to unpaid overtime work.

¹⁴ K. Lister and T. Hamish: *The state of telework in the U.S.: How individuals, business, and government benefit* (San Diego, California, Telework Research Network, June 2011).

¹⁵ Messenger and Gschwind, op. cit.

¹⁶ *ibid.*

be now, but they still provide a useful indication of the state of telework, and often the overall trend in its proliferation.

- 29.** In an effort to reduce this information gap, the ILO Conditions of Work and Equality Department (WORKQUALITY) is currently undertaking a joint collaborative study with Eurofound on the use of new ICTs to perform work outside the employer's premises and the effects on working time, work-life balance, job performance, and workers' health and well-being. This forthcoming study focuses on workers working away from the employer's premises using ICTs, that is to say teleworking broadly defined to include ICT-related "mobile" work. A standard expert questionnaire was jointly developed to gather information from existing datasets and studies, building on similar instruments previously implemented by Eurofound. Based on this questionnaire, Eurofound used its network of correspondents to gather information from ten EU Member States, which is being supplemented by data from the Sixth European Working Conditions Survey (2015). The ILO has distributed the same standard expert questionnaire in five countries in other regions of the world. The responses to this questionnaire should allow for a comparative analysis of the incidence of telework/ICT-mobile work. They should provide insight into its effects on working time, work-life balance, individual and organizational performance, and occupational health and well-being, as well as into emerging national and organizational policy responses in the countries covered.

3.1. Telework around the world

- 30.** Even with such data limitations, it is still possible to paint a general picture of the situation of telework in a number of developed countries and some emerging economy countries, even if that picture is often dated and incomplete.

3.1.1. United States

- 31.** Table 2 presents the number of teleworkers in the United States for different categories of employers in the public (federal, state and local governments) and private sectors (both for-profit and non-profit) for the years 2005 to 2014. These figures are taken from GlobalWorkplaceAnalytics.com based on their analysis of American Community Survey (US Census Bureau) data. GlobalWorkplaceAnalytics.com explains that the American Community Survey derives its data on work at home (telework) from the question: What was your primary means of transport to work during the survey week? They add that "worked at home" is one of the choices and conclude that if that population responded that they worked primarily at home during the survey week, then the assumption is that they worked there, meaning that they teleworked/telecommuted, at least half time. The company explains that, while the terms are often used interchangeably, "telework" is defined as the substitution of technology for travel, while "telecommuting" is more narrowly defined as the substitution of technology for commuter travel. Thus if someone takes work home after being at the office it is considered telework, but not telecommuting, and if someone works at home instead of driving to an office they are telecommuting. They also note that many people and organizations are moving away from both terms in favour of "distributed work", "mobile work", "remote working" (for the United Kingdom), and "workshifting" (Canada).
- 32.** Subject to these caveats, it is possible to note the following telework/telecommuting trends in the United States. Regular work at home (assumed to represent mostly telework) among the non-self-employed population grew by 102 per cent from 2005 to 2014, with 3.7 million employees, representing 2.8 per cent of the workforce, working from home at least half of the time by 2014. From 2013 to 2014 the teleworking/telecommuting population grew much faster than the employee population as a whole, respectively 5.6 per cent and 1.9 per cent. Note the constant growth in the absolute number of teleworkers over the period.

Table 2. United States teleworkers, by type of employer, 2005–14

Year	For-profit employer	Non-profit employer	Local government employer	State government	Federal government employer	Total employee teleworkers
2005	1 468 084	173 271	73 714	74 018	30 268	1 819 355
2006	1 712 562	238 554	81 171	102 457	161 521	2 296 265
2007	1 877 271	247 952	88 302	115 299	147 213	2 476 037
2008	2 159 915	273 620	103 740	131 245	157 858	2 826 378
2009	2 225 497	298 436	113 007	138 801	153 492	2 929 233
2010	2 284 006	306 598	114 150	151 244	167 030	3 023 028
2011	2 387 745	320 494	123 001	158 362	158 711	3 148 313
2012	2 501 855	324 984	119 622	164 382	157 682	3 268 525
2013	2 696 963	355 327	122 530	160 661	144 966	3 480 447
2014	2 860 517	355 327	131 597	170 932	158 688	3 677 061
% of teleworkers in 2014	2.9	3.1	1.4	2.6	3.4	2.8

Source: GlobalWorkplaceAnalytics.com analysis of 2005–14 American Community Survey (US Census Bureau) data.

33. Table 3 presents the above figures, but this time in terms of the growth rate in telework/telecommuting within each employer category for the same period. While the proportion of telework as a percentage of overall work within the employer category remains very modest, the growth rate among all employer categories is very striking. The fourfold increase in the telework rate for the federal Government is no doubt due to the passing of the Telework Enhancement Act, signed into law by President Barack Obama on 9 December 2010, the culmination of years of legislative activity to promote telework in the federal Government. It requires each Executive Branch agency to establish a policy under which eligible staff are authorized to telework.

Table 3. United States telework multi-year growth, 2005–14, by employer category

	2005–14 (%)
For-profit companies	94.8
Non-profit organizations	105.1
Local government	78.5
State government	130.9
Federal Government	424.3
Total telework growth	102.1

Source: GlobalWorkplaceAnalytics.com analysis of 2005–14 American Community Survey (US Census Bureau) data.

3.1.2. Canada

34. According to the International Data Corporation’s *Canadian Mobile Worker 2012–2016 Forecast*, 68.9 per cent of employed Canadians were doing at least some mobile work by 2012, with the figure expected to rise to 73 per cent by 2016. Among the factors driving this trend were lengthening commute times, the desire for work–life balance, the proliferation of mobile devices, the growth of cloud computing, and faster network speeds that allow workers to do more, faster on their mobile devices. These figures seem excessive.

35. Deloitte Access Economics reported that in 2006, 7 per cent of Canadian workers, including the self-employed, considered home to be their primary place of work. When the self-employed were excluded, the estimate dropped to around 3.5 per cent. In 2008, a total of 11.2 per cent of all employees indicated that they worked from home at least some of the time.¹⁷

3.1.3. Australia

36. According to data from the Australian Bureau of Statistics *Time Use Survey*, 6 per cent of all Australian employees had telework arrangements with their employer in 2006, ranging from full-time telework to occasional arrangements. However, these statistics are now ten years old, and do not reflect telework today. Alternative data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey indicate that the share of Australian employees with a telework arrangement with their employer has slightly decreased. However, the overall level of telework by employees is higher, with around 18 per cent of all surveyed Australian employees undertaking some work from home in 2009. Deloitte Access Economics states that this difference is explained by many individuals teleworking on an informal basis, rather than through formal arrangements with their employer. It reports, furthermore, that these informal teleworkers are likely to mostly be “day extenders” who undertake some additional work from home that could not be completed during standard business hours in the office, or individuals who telework on an ad hoc basis around family needs (such as when a dependent child is ill). The same report indicates that the overwhelming majority of teleworkers in Australia only undertake telework on a part-time basis.¹⁸

3.1.4. Europe

37. As can be seen from table 4, in 2005 almost all European Union countries, plus Norway, (with the exception of Malta which had none) registered telework of varying incidence. The Czech Republic and Denmark had the most telework by both those who reported being involved in telework at least “a quarter of the time” or more (15.2 per cent and 14.4 per cent, respectively) and those who were involved in telework “almost all of the time” (9 per cent and 2.6 per cent, respectively). In all cases, occasional telework was always much higher than full-time telework, with varying degrees of differences among countries.

Table 4. Incidence of telework in the EU27 countries and Norway, 2005 (%)

	% involved in telework at least “a quarter of the time” or more	% involved in telework “almost all of the time”
Czech Republic (CZ)	15.2	9.0
Denmark (DK)	14.4	2.6
Belgium (BE)	13.0	2.2
Latvia (LV)	12.2	1.8
Netherlands (NL)	12.0	1.9
Estonia (EE)	11.8	1.4
Finland (FI)	10.6	1.6

¹⁷ Deloitte Access Economics: *Next generation telework: A literature review*, Department of Broadband, Communications and the Digital Economy (2011).

¹⁸ *ibid.*

	% involved in telework at least “a quarter of the time” or more	% involved in telework “almost all of the time”
Poland (PL)	10.3	2.3
Norway (NO)	9.7	1.3
Sweden (SE)	9.4	0.4
Austria (AT)	8.6	3.2
United Kingdom (UK)	8.1	2.5
Slovakia (SK)	7.2	3.4
Greece (EL)	7.2	1.4
Spain (ES)	6.9	1.5
Lithuania (LT)	6.8	0.7
Slovenia (SI)	6.7	1.9
Germany (DE)	6.7	1.2
France (FR)	5.7	1.6
Cyprus (CY)	5.7	0.0
Luxembourg (LU)	4.8	0.0
Ireland (IE)	4.2	0.5
Hungary (HU)	2.8	0.5
Romania (RO)	2.5	0.7
Italy (IT)	2.3	0.5
Portugal (PT)	1.8	0.4
Bulgaria (BG)	1.6	0.0
Malta (MT)	0.0	0.0
EU27	7.0	1.7

Note: Results are based on responses to Q.11: “Does your main paid job involve: telework from home with a PC?”.

Source: Fourth European Working Conditions Survey, 2005.

3.1.5. United Kingdom

38. As an illustration of how variable telework numbers can be across different sources, it is worth noting that for 2009, Deloitte reported raw figures for telework in the United Kingdom as 12.8 per cent of the workforce, implying that approximately 3.7 million people worked mainly at or from home.¹⁹ It indicated, however, that two-thirds of those counted as teleworkers in these figures were self-employed, meaning the figure of employees who teleworked more than three days per week was around 4.3 per cent, still almost double the rate presented in the 2005 Fourth European Working Conditions Survey report.

3.1.6 Switzerland

39. The Swiss Federal Statistical Office’s 2001–15 labour force survey reports that during the period under review the number of workers with either regular or occasional home-based telework rose almost fourfold, from 248,000 to 831,000.²⁰ The Statistical Office estimates

¹⁹ Deloitte Access Economics, op. cit.

²⁰ Office fédéral de la statistique: *Le télétravail à domicile en Suisse, 2001–2015* (2016).

that 21 per cent of the active labour force was involved in home-based telework in 2015, at least occasionally. However, the number of regular teleworkers (defined as those who telework more than 50 per cent) remained modest, despite also quadrupling from 31,000 in 2001 to 120,000 in 2015. The proportion of telework varied considerably depending on economic sector, with the highest prevalence found in the ICTS sector, where over 50 per cent of workers had teleworked at least occasionally in 2015. It was also the sector with the highest proportion of regular home-based teleworkers – 7.2 per cent of the active workforce. Education was the sector with the next largest share of teleworkers, with 45 per cent of workers engaged in home-based telework, at least occasionally. This was followed by professional, scientific and technical activities, and then financial services, in which around a quarter of workers were involved in telework, both regular and occasional. It is important to note that the survey covered only home-based teleworkers, whether regular or occasional. The evolution in telework is particularly striking; in 2001, telework, even on an occasional basis, accounted for less than 15 per cent of the workforce in all sectors; by 2015, telework rates had risen to above 15 per cent in over half of all sectors of activity. Closely related to the greater digitization of the economy, the ICT industry showed the highest rise in teleworkers.

3.1.7. Japan

40. In Japan, “Worldwide Mobile Worker 2007–2011 Forecast and Analysis” reported in 2006 that Japan had 53 per cent of teleworkers, and forecast that this figure would rise to 80 per cent of the workforce by 2011, making it the fastest rise in the share of teleworkers around the world. Similarly, a 2003 survey by the IT Japan Strategy Committee of the Government of Japan reported that the 2002 teleworking population in the country – those who spent at least eight hours per week teleworking – consisted of about 3.11 million employees and 970,000 self-employed teleworkers. The proportion of total teleworkers to all workers was 6.1 per cent. The projection was to have about 20 per cent of all Japanese workers teleworking by 2010, but no figures are now available to indicate how far this plan has been realized, despite active promotion efforts on telework by the Government of Japan.²¹ Such excessively high and widely varying figures regarding the incidence of telework and the equally optimistic forecasts of its growth are a perfect illustration of the definitional problems that have been highlighted and the caution with which all telework statistics and forecasts should be regarded.
41. By contrast, Deloitte Access Economics reports that while Japan had been relatively late to implement telework, the gap with European and other countries has closed. Surveys conducted in 2008 showed that 15.2 per cent of all Japanese workers were teleworking more than eight hours per week, but underlined that this was not easily comparable with the estimates from other countries where employees had teleworked “some of the time”, as it included the self-employed. Deloitte noted that a comparable estimate for Canada, incorporating all workers, was around 19 per cent, while in Australia 12.6 per cent of all workers, including the self-employed, teleworked more than eight hours per week.²²

²¹ G. Kaupins and K. Usui: “Countervailing forces affecting Japanese telework behavior”, in *Journal of Business and Leadership* (2008), 4(2), pp. 60–67.

²² Deloitte Access Economics, op. cit.

3.1.8 Latin America

42. According to the 2009 annual report of the University of Costa Rica's Information and Knowledge Programme (PROSIC),²³ telework is a growing phenomenon in both Latin America and the Caribbean, though the pace of that growth varies widely. Countries such as Argentina and Chile are at the forefront in both promoting its use and developing regulatory frameworks to govern it, as existing legal and industrial relations frameworks, including occupational safety and health regimes related to home-based work, and expenses associated with technology for telework, are not considered to be up to the task.
43. In terms of prevalence, estimates indicate that about 650,000 workers teleworked in Chile in 2005, representing a telework penetration rate of 10.7 per cent of employed workers. In Argentina, there were an estimated 900,000 teleworkers in 2006. By 2009, it was estimated that there were about 1.2 million households where at least one member was home-based, many of them teleworkers.²⁴

4. Telework in ICTS and financial services

44. As a rule, sectors whose work involves very high informational components are the most telework-compatible, as information is susceptible to digitization which, in turn, makes it possible to perform jobs remotely. Although not all jobs in ICTS or in financial services are amenable to telework, as some require direct physical interaction with co-workers or clients (such as branch office banking or enterprise computer systems management), most are. As already noted, telework started in the 1970s in the information industries, where the jobs involved were flexible and access to ICTs prevalent. Technological innovation, the very business of ICTS, is moreover a principal driver of telework. Despite a few high-profile defections from telework from such major hi-tech companies as Yahoo and Google, it is not surprising that telework is widespread in the industry.
45. The basic raw materials of financial services are similarly money and information; and money, which these days is mainly accounting entries, is, like information, easily converted into electronic form and thus dematerialized into information. It goes without saying that, once digitized, information (a component of ICT) can be easily manipulated and worked on remotely, making it perfectly compatible with telework.
46. Thus, if telework is not as widespread in financial services as it could be, this may be related more to other concerns, such as cyber security, regulatory constraints and management resistance, rather than technical obstacles. In fact, the emerging and rapidly developing financial technology industry (more popularly known as FinTech), which closely fuses technological innovations with financial services, shows the great potential of technology and ICT-enabled work to fundamentally alter financial services. FinTech usually applies to that segment of the technology start-ups that is transforming how such financial services activities as mobile payments, money transfers, loans, fundraising and even asset management operate. Recent reports indicate that global investment in FinTech has skyrocketed from US\$930 million in 2008 to over US\$12 billion by 2015. The rise of FinTech is changing the way businesses operate, with traditional models of raising money for business by turning to banks or conventional investors no longer the only option, since

²³ University of Costa Rica: "El teletrabajo en Costa Rica", in *Hacia la Sociedad de la Información y el Conocimiento en Costa Rica*, Programa de la Sociedad de la Información y el Conocimiento (PROSIC), Ch. 10, (San José de Costa Rica, 2009).

²⁴ *ibid.*

these new actors make it ever easier to tap into other sources of business financing, such as crowd-funding from anywhere in the world from people the business operators have never even met. Cross-border money transfers are a similar area in which FinTech companies are expanding.

47. The functions in financial services most often involved with telework are in information technology (IT), which reflects a common option for IT work across all industries.²⁵ Apart from IT, other jobs with ongoing, regular telework options are those involving people who write brochures and advertising copy. That industry's culture places great emphasis on face-to-face interaction, particularly in supervisory level positions, for which working from fixed office locations is a must. Furthermore, the heavy regulatory oversight on the industry reinforces the general cultural unease with workers who are out of sight, and equates effective supervision with direct supervision. Nevertheless, some financial sector professionals, including financial planners (many of whom are self-employed), insurance sales agents or appraisers, frequently work away from the office.

Box 1

Telework and cyber security

Governments and organizations everywhere, and more so those in financial services, are very sensitive to data security.

The United States National Institute of Standards and Technology (NIST) is revising its telework guidance to address emergent cybersecurity concerns, especially those associated with employees who access work content on their personal smartphones, tablets and computers. The fear is that so-called bring-your-own device (BYOD) practices could make organizations vulnerable to hackers. NIST notes that employers are finding that "many data breaches occur when attackers can steal important information from a network by first attacking computers used for telework". It therefore recommends that organizations "plan their remote access security on the assumption that the networks between the telework client device and the organization ... cannot be trusted". NIST's original 2009 telework guidance was developed before the advent and subsequent proliferation of smartphones and other more recent devices.

In France, similarly, l'Agence nationale de la sécurité des systèmes d'information (ANSSI) has defined 12 sectors of critical national security importance and identified 218 public and private "vitality important operators" needing priority protection against cyberattacks. These enterprises, managing sensitive national infrastructures, including in telecoms, are now under an obligation to create cybersecurity units, to analyse risks and to define security plans to address those risks. They are also forbidden to connect certain critical systems to the Internet.

In an era in which passwords are increasingly considered inadequate protection, many organizations, particularly banks, are turning to advanced authentication to help manage access and improve trust among customers and business partners, and to strengthen authentication procedures for employees to access networks and data remotely.

Source: Adapted from E. Brown: *Attackers honing in on teleworkers? How organizations can secure their data*, available at <http://www.nist.gov/itl/csd/attackers-honing-in-on-teleworkers-how-organizations-can-secure-their-datata.cfm>, 14 Mar. 2016; and E. Christiann: *Mobile cybersecurity: A new challenge for enterprises*, available at <http://www.sofrecom.com/en/blog/publications/mobile-cybersecurity-a-new-challenge-for-enterprises>, 2 May 2016.

4.1. Benefits, challenges and disadvantages of telework in ICTS and financial services

48. As with any business decision, prior to choosing to telework, the goals as well as the potential benefits and challenges involved for all stakeholders need to be clearly considered

²⁵ M. Kolakowski: "Financial jobs with flexible hours", on website *about.com*, *financial careers*, available at: <http://financecareers.about.com/od/choosingemployers/a/flexiblehours.htm>, updated 14 Jan. 2016.

and understood. The following is a brief overview of what some of these are, as highlighted by academic, business and social partner observers.

49. Most research confirms that telework offers benefits to employers and workers as well as to their wider communities.
50. For businesses, telework is first and foremost said to expand their pool of skilled workers, reduce the spread of illness (by enabling sick workers to continue their work away from their usual place of work), reduce costs including real estate expenses related to having to have sufficient space at the work premises to accommodate all workers, increase productivity, reduce their energy consumption and their carbon footprint, enable them to comply with any legislative requirements on the employment of disabled persons and other members of vulnerable groups of people, reduce staff turnover and absenteeism, improve staff morale, enhance enterprise continuity strategies, improve their ability to handle business across multiple time zones, and increase their cultural adaptability.
51. As for teleworkers, they may gain from: better work–life balance; savings from a reduction in costs related to such expenses as the need for a vehicle, parking or public transport, work clothing, food and insurance; a significant reduction in commuting time; and other substantial savings related to not having to commute to and from home on a daily basis. However, a number of unions have highlighted that in the absence of collective bargaining agreements that protect their rights, teleworkers are often exposed to a number of risks, including: lack of autonomy when employers attempt to implement new ways of work monitoring; a heightened sense of isolation and other psychosocial issues; lack of labour inspection and thus of labour protections; and, in the case of women working from home, the risk of a double charge of work in combination with care responsibilities.
52. For the wider society, telework benefits are reflected in economic, environmental, and personal ways, with the use of ICTs providing increased benefits for employees, especially ones with physical disabilities, and helping to lead to a more energy-saving society.
53. Some of the potential benefits and promises, as well as challenges and potential disadvantages, of telework to organizations, individual workers and society as a whole are summarized in table 5. These are purely indicative and are not intended to be a comprehensive list of such outcomes. They nevertheless give a good idea of what enterprises and individual workers wishing to embark on telework might expect.

Table 5. Potential benefits/promises and challenges/potential disadvantages of telework

	Potential benefits/promises	Potential challenges/disadvantages
Society *	Environmentally friendly Reduced infrastructure stress Global collaboration Improved disaster preparedness Better for individuals with disabilities	
Employers	Reduced overheads Increased margins Lower turnover Greater talent pool Inexpensive, desirable benefit	Different (albeit usually lower) expenses Increased IT demands Security issues May not work for some tasks Some loss of control

	Potential benefits/promises	Potential challenges/disadvantages
Workers	Reduced commuting time/costs Life choice flexibility Dependent care flexibility Higher autonomy Higher job satisfaction Lower stress Lowered work–family conflict	Blurring work–life boundaries Added family–work conflict Working on holiday Difficult to "unplug" from work Social and professional isolation Missed opportunities

* Regarding potential disadvantages to society, some authors suggest that telework might promote urban sprawl because workers who telecommute regularly can afford to live at a greater distance from their employer's premises; others suggest that working from home may reinforce the gender division of labour in the household because it makes it easier to perform unpaid care work.

54. While these benefits, challenges and disadvantages are applicable across the economy as a whole, some issues are particularly critical to the financial services sector. Some experts note that enabling employees to work remotely increases the likelihood that they might use their own devices to communicate via unsecured public networks, which increases the enterprise's vulnerability to penetration from unauthorized quarters. They therefore recommend keeping a close eye on the devices and programmes employees use when they work away from their employer's premises, and ensuring they set up safeguards against any potential hacks and breaches. They also recommend that all devices used for work should be password-protected, ensuring that all data going from and to those devices is fully encrypted, and that a current inventory of all devices that are used by teleworkers, including their own (so-called BYOD – bring your own devices), have GPS tracking turned on. Additionally, all devices used for work should include capacity for them to be remotely wiped of data in the event of their loss or theft (see box 1, above).

55. Some researchers have also attempted to estimate the monetary values accruing from the potential benefits, but as these are location-specific, it is not possible to extrapolate them across different countries, and sometimes even from one part of a country to another. Nevertheless, the findings of one such study – for Canada – are presented in the following table to provide an indication of the kind of potential savings possible from telework for business, for the individual and for the wider society, if exploited to its full potential using existing technologies. Those potential savings are estimated at 53 billion Canadian dollars (CAD) annually.

Table 6. Potential savings through telework, Canada (in Canadian \$)

Group	1 teleworker	250 teleworkers	Canada \$ (millions)
Employer	10 037	2 492 146	44 000
Employee	1 939	484 738	8 500
Community	132	32 940	578
Overall	12 108	3 009 824	53 078

56. For the United States, a comparable study²⁶ undertaken using a similar methodology, but assuming that teleworkers worked from home half of the time, projected the potential economy-wide benefit if all employees in the United States with roles amenable to telework were to move into part-time telework, at US\$645 billion. This study incorporated reduced expenditure on road maintenance as a community-level benefit, but excluded health-care benefits.

²⁶ K. Lister and T. Hamish: *The state of telework in the U.S.: How individuals, business, and government benefit* (San Diego, California, Telework Research Network, June 2011).

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57. However, as noted in table 5, there can be as many potential disadvantages to telework as there are potential advantages, and advantages for one side may simply stem from disadvantages for the other. Reduced real estate, energy and other costs for employers may come about only because these costs have been shifted to workers, if provision is not made for the employer to meet at least a prorated share of those costs that can be estimated to stem from the employee's telework. Another risk for workers also derives from the potential for work intensification if the right of teleworkers to switch off devices and not receive company communications outside their working hours is not explicitly recognized and fully respected. Workers' apparent flexibility to set their own work schedules in line with their preferences and/or private needs can all too easily become a trap, where the teleworker is expected to be available for work at all times.
58. Another important area that all parties to telework arrangements need to consider fully is the legal responsibility for the occupational safety and health of teleworkers, whether they are home-based or mobile. In 2011, the Administrative Appeals Tribunal of Brisbane, Australia, found the telecoms company Telstra liable for injuries suffered at home by one of its home-based teleworkers. The tribunal considered the injuries to be work-related and ordered the company to pay for both the cost of treating the injuries and compensation for lost income, even though the company denied liability on the ground that the falls occurred outside the worker's designated work area.

4.2. Teleworker demographics, including gender

59. The demographic distribution of teleworkers, like everything else to do with this category of workers, is indeterminate as different studies report different findings. A 2014 study reported, for instance, that the profile of the typical telecommuter, at least in that study of 556 employees, was that of a male of no particular generational category working from home. Some had children and some did not; there was no clear pattern that would suggest men wanted to work from home because of family concerns.²⁷ In the European Union, a study by Eurofound determined that male employees were generally more likely to telework than their female counterparts; on average, about 8.1 per cent of male employees engaged in telework, in contrast to 5.8 per cent of female employees.²⁸ Eurofound surmised that such gender differences can be at least partly explained by the distribution of telework among sectors and occupations. Sectors with a higher incidence of telework – such as real estate and financial intermediation – also tend to have a male-dominated workplace. The same tendency is true for workers in higher skilled occupations as well as technical occupations, where there are fewer female employees. Eurofound suggested, therefore, that gender-segregated labour markets seem to be one of the possible factors explaining the gender differences with regard to telework.
60. Other studies, such as the one by the Swiss Federal Statistical Office cited above, do indeed confirm that there are more male than female teleworkers. In 2015, close to two-thirds of home-based occasional teleworkers in Switzerland were men – 24 per cent of men as compared to 18 per cent of women workers. This is because most managerial and professional category workers, the categories who tend to be allowed to telework, are male. Women, however, constituted almost half of home-based regular teleworkers, having experienced more rapid growth (sixfold since 2001) in this category of teleworkers than men.

²⁷ D. Cook: "Men dominate telecommuting crowd", on website *BenefitsPRO.com*, 5 May 2014, available at <http://www.benefitspro.com/2014/05/05/men-dominate-telecommuting-crowd>.

²⁸ Eurofound, op. cit., p. 7.

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61. With regard to level of education, while it is by no means clear that the Swiss example can be generalized globally, the Swiss Federal Statistical Office's 2001–15 labour force survey indicates that workers with a tertiary level of education dominate home-based telework. In 2015, more than a third of those with at least a tertiary level of education teleworked, at least occasionally, as opposed to 13 per cent of those with only a secondary level of education and only 3 per cent of workers with no more than obligatory education.

5. Social dialogue

62. The 2010 report *Telework in the European Union*²⁹ notes that governments and the social partners have held extensive consultations on telework going back many years. Even before the cross-sectoral European social dialogue on telework had even begun, the social partners in the Sectoral Social Dialogue Committee for Telecommunications had started their consultations and negotiations, adopting a joint document aimed at laying down guidelines for telework in Europe for their sector, which they signed on 7 February 2001.
63. UNI Europa Finance and UNI Europa ICTS have subsequently negotiated and concluded joint declarations on telework with their respective social partners at the European level – the Association of Mutual Insurers and Insurance Cooperatives in Europe (AMICE), the European Federation of Insurance Intermediaries (BIPAR) and Insurance Europe for the insurance industry (signed in February 2015), and the European Telecommunications Network Operators' Association (ETNO) for the ICTS sector (signed in February 2016). The two joint declarations build on the cross-industry Framework Agreement on Telework of 16 July 2002.³⁰ The joint declarations commit the social partners to their promotion, and to follow them up by highlighting good practice examples of telework by different players. The declarations cover in-house employees who work at distance on a regular basis, and in the case of the insurance sector, mobile sales workers and loss adjusters in jurisdictions where working conditions arranged by social partners do not distinguish between mobile sales workers and loss adjusters on the one hand, and other employees on the other hand. The declarations also stipulate respect for applicable national regulations. They call on their respective members, as well as interested parties in both sectors, to consider their own practices in light of the declaration.
64. Furthermore, the declarations underline the voluntary character of telework and require the employer to monitor employees performing mobile work in order to support them in this process. Members are invited to consider concluding, before starting mobile working arrangements, a specific complementary collective agreement and/or individual agreements, addressing the following issues: (a) frequency of the telework and accessibility of the teleworker; (b) occupational health and safety; (c) data protection; (d) the employer's access to the workplace in order to verify that the health and safety and data protection provisions are correctly applied; (e) where applicable, conditions related to the provision, installation and maintenance of equipment necessary for the performance of mobile work; (f) what should be done in case of equipment breakdown; (g) the right of employees to access training and career development opportunities and the requirement for them to be subject to the same appraisal policies as those applicable to the employer's non-teleworking employees; (h) the right of teleworkers to benefit from the same entitlements as all other company employees with equivalent workloads, salary and performance standards. Performance monitoring

²⁹ Eurofound, op. cit.

³⁰ The declarations can be accessed at:
https://www.etno.eu/datas/ETNO%20Documents/Joint_Declaration_telework_UNIeuropa_ETNO.pdf and
http://www.amice-eu.org/userfiles/file/ISSDC_telework_declaration_2015-02-10_signed.pdf.

should be of output rather than activity, and any performance monitoring arrangements must be consistent, having regard for the specific characteristics of the type of mobile work.

65. The social partners similarly recognize the risk of employees not being covered by accident insurance in the event of accidents happening in the mobile working environment and recommend that members consider suitable steps to be taken in this field, such as considering whether additional insurance is necessary. They also stipulate the same collective rights for teleworkers as for workers at the employer's premises, and that no obstacles should be put in the way of employees working on a mobile basis being able to communicate with employees' representatives.
66. In the Nordic region, the finance sector social partners, Financial Services Union Denmark and their employer counterpart, *Finanssektorens Arbejdsgiverforening*, have signed a framework agreement on telework which is included as a standard protocol in collective agreements. The framework agreement specifies that teleworking may only be part of the total working time, so that workers' relations to the company are maintained, both workwise and socially. In addition, the employee may request a teleworking maximum of 50 per cent of working time, calculated over a period of 13 weeks. It is also underlined that the teleworker must have access to a workplace on the company premises.
67. The social partners have also concluded collective and company-level agreements on telework. In Germany, *Vereinte Dienstleistungsgewerkschaft* or *ver.di*, for instance, has collective agreements on mobile telework and mobile working with Deutsche Telecom, originally first implemented in 1995 before *ver.di* itself was created as a result of a merger of DPG (Deutsche Postgewerkschaft) with four other unions.
68. In the Russian Federation, telework has been regulated by the Labour Code since 2013, following consultations in the country's Tripartite Commission.
69. It is also worth highlighting the Buenos Aires Declaration on Telework adopted by the 15th International Telework Workshop, organized in Buenos Aires from 25–27 August 2010. The declaration underlines, among other things, the need to establish a general legal framework to protect all teleworkers, especially those with disabilities and other vulnerable groups, through regulation or legislation, and to ensure them the right to freedom of association, organization and social security.

6. International instruments related to telework

70. No international labour instrument specifically addresses the issue of telework. However, the Home Work Convention, 1996 (No. 177), and the Home Work Recommendation, 1996 (No. 184), both adopted by the International Labour Conference in 1996, would seem to be equally applicable to home-based telework, even though the concrete applicability of these instruments to teleworking is far from being generally accepted.³¹ The relevant provision states that:
 - (a) the term *home work* means work carried out by a person, to be referred to as a homemaker,
 - (i) in his or her home or in other premises of his or her choice, other than the workplace of the employer;

³¹ V. Di Martino: *The high road to teleworking* (Geneva, ILO, 2001), p. 107.

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- (ii) for remuneration;
 - (iii) which results in a product or service as specified by the employer, irrespective of who provides the equipment, materials or other inputs used,

unless this person has the degree of autonomy and of economic independence necessary to be considered an independent worker under national laws, regulations or court decisions.

71. Di Martino notes that, while some people have maintained that “telework should be discussed within the existing framework provided by this Convention”, others have argue that “while home work and telework might have some common features, there is none the less a clear distinction in the fact that teleworking connects the workers electronically to their employers, whereas home work might not do so”.³²

72. The Recommendation supplements the provisions of the Convention without imposing further obligations, by specifying the following, among other provisions:³³

- the right of homeworkers to be kept informed of their specific conditions of employment;
- the registration of employers of homeworkers and of any intermediaries used by such employers;
- the application to homeworkers of national laws and regulations concerning minimum age for admission to employment;
- the right of homeworkers to organize and bargain collectively;
- the fixing of minimum rates of wages for homeworkers;
- the protection of occupational safety and health;
- hours of work, rest periods and leave;
- social security and maternity protection;
- protection in the case of termination of employment;
- support of training and other programmes specifically targeted at homeworkers.

7. Concluding remarks

73. All available indications point to the fact that telework, whether occasional or full-time, is prevalent and growing, with far-reaching implications for the world of work. Telework is one of those technologically facilitated processes which, as noted in the Director-General’s Report, *The future of work centenary initiative*, could prove a mixed blessing as it allows the individual “to be more at home in their work, but also more at work in their home”.

74. A major obstacle to understanding, monitoring and assessing the real state of telework, with a view to developing policy responses to any issues it may raise, is the lack of a universally agreed definition of the phenomenon, and therefore a lack of clarity regarding the factors to

³² *ibid.* See also footnote 3 regarding the distinction between home-based telework and home work as understood under Convention No. 177.

³³ *ibid.*

be taken into account in its measurement. Once a common definition of telework is agreed, addressing the underlying problem of a lack of statistical information would require governments to start systematically collecting data on the incidence of telework in the workforce by, for instance, adding questions to existing data collection instruments, such as labour force surveys or household surveys.

- 75.** A final issue that ILO constituents may wish to reflect upon is the fact that today's technological tools mean that it is no longer technically impossible for employers anywhere, including in ICTS and financial services, to tap into the wider global labour pool of skilled workers and to employ them as full-time teleworkers – that is to say outside their company's country of domicile. This gives rise to such questions as which labour laws should apply – those of the country where the employer is located or where the teleworker is working? What impact would that have on such pillars of decent work as freedom of association, collective representation, social security regimes and social dialogue generally, given the fact that the workforce would then be dispersed across countries – and even regions – with differing labour laws? This is not a mere hypothesis; crowd working and platform-based work in the sharing economy already involve the kind of collaborative work arrangements, spanning countries and even continents, that technology and telework also facilitate. Nonetheless, this possibility is less likely in conventional telework involving regular employees working away from their employer's premises.