

**TELEWORK:  
THE EXPERIENCES OF TELEWORKERS,  
THEIR NON-TELEWORKING COLLEAGUES  
AND THEIR LINE MANAGERS AT  
THE CONSEIL GENERAL DU FINISTERE**

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## **Abstract**

The introduction of information technology, or IT, has brought increased possibilities to work outside of the traditional office. One of these possibilities is telework. Telework refers to work carried out away from the usual place of business, often via electronic means. This investigation provides a unique contribution to the lack of empirical studies on telework in France. Despite its predicted growth, telework has not developed in the French public sector. This study uses role set analysis to assess the experiences of part-time teleworkers (who telework on average two days per week as part of their full-time schedules) at the Conseil Général du Finistère, or CGF, a regional government in Brittany, France. Role set analysis claims that the expectations of role set holders can be evaluated. In this exploratory case study, role set holders are represented by teleworkers, their non-teleworking colleagues and their line managers. Questionnaires, containing attitude scales and open-ended questions, were distributed in three versions to each group of role set holders to gather data. The use of frequency tables and the extraction of Meaning Units, or MUs, indicated perceived advantages and disadvantages of telework, which were revealed through the lenses of role expectations. Teleworkers experienced more advantages due to role complexity: temporal and spatial flexibility were beneficial to teleworkers, despite increased difficulties for non-teleworking colleagues and line managers. Non-teleworkers experienced more disadvantages due to increased role expectations: working with part-time teleworkers generated increased logistical and co-ordination difficulties. Line managers experienced more disadvantages due to multiplied role expectations: managing teleworkers and non-teleworkers in the same departments meant increased burdens in terms of work organisation, control and resentment from non-teleworkers. From an academic viewpoint, the analysis of role sets through a tripartite perspective brings to light thresholds which regulate perceived advantages and disadvantages of telework and reveals that role set holders do not interact in a static fashion. In terms of business practice, the findings argue that telework upsets work relationships in the French context because it relies on less face-to-face contact. Results also suggest that despite the perceived success of the telework programme, the CGF has not adopted a remote working culture.

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas. Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signed \_\_\_\_\_ Date \_\_\_\_\_

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## **Key terms**

Anglo-American: refers to the English-language cultural context, notably from the United Kingdom and the United States of America.

Cadre: refers to a managerial-level employee in France.

CGF: Conseil Général du Finistère. Territorial administration in Brittany, France, responsible for the territory of the Finistère. Headquartered in the city of Quimper.

CGF pilot programme, CGF pilot telework programme, CGF telework programme, pilot, telework programme: the CGF telework programme for voluntary part-time, telework.

Line manager: any CGF line manager who supervises a CGF telework programme participant.

Non-teleworking colleague, non-teleworker, office-based counterpart, office-based staff, office-based worker: any CGF telework programme study participant working in a post similar to a teleworker, who is a full-time employee and is office-based.

Part-time telework: refers to telework carried out by CGF employees, at least two days per week, as part of their full-time schedules.

Questionnaire recipient, participant, recipient, respondent, telework programme participant: refers to a person who received and replied to a questionnaire for this study. Also refers to a teleworker, non-teleworking colleague or line manager.

Role set: refers to the study of the expectations between teleworkers vis-à-vis their non-teleworking colleagues or line managers using role set analysis developed by Merton (1957) and proposed as an analytical method in this study.

Role set holder, role holder: refers to a teleworker, non-teleworking colleague or line manager in this study.

Role set holder dyad: refers to pairs of role set holders in this study (teleworkers and non-teleworking colleagues, or teleworkers and line managers).

Structural issue: refers to IT hardware or software used by teleworkers at the CGF.

Technical aspect/issue: refers to any hardware or software aspect/issue, including the work environment (e.g., IT infrastructure).

Telework: work carried out (often via electronic means) partially, or completely, away from the usual place of business.

Teleworker: any CGF telework programme participant teleworking at least two days a week, as part of their full-time schedule.

## **Abbreviations**

ART (France): Autorité de la Réglementation des Télécoms (telecom authority).

CGF (France): Conseil Général du Finistère (regional government of the Finistère region).

DATAR (France): Délégation à l'Aménagement et à l'Action Régionale (delegation for regional development).

ECaTT: Electronic Commerce and Telework Trends.

ETO: European Telework On-line.

EU: European Union, including the following member countries: Austria, Belgium, Bulgaria, Cyprus, The Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and The United Kingdom.

EU 15: First fifteen member countries of the European Union, including: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden and The United Kingdom.

EWTD: European Working Time Directive.

INSEE (France): Institut National des Statistiques et des Etudes Economiques (national institute for statistics and economic studies).

IT: Information Technology.

SIBIS: Statistical Indicators Benchmarking the Information Society.

SME(s): Small and Medium-Sized Enterprise(s).



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# 1. Study background

## 1.1 The work environment

*This section reveals how social interaction and communication patterns in the work environment have influenced the emergence of telework*

The growth of industrial capitalism (Edgall, 2010; Watson, 2008) nurtured the idea that humans use work to sustain their survival. The appearance of the workplace and relationships between workers and their managers revealed new issues to be explored (Grint, 2005). One example from the beginning of the 20<sup>th</sup> century is Taylorism, attributed to Taylor, who studied job design and developed the concept of work specialisation. These issues would later be identified in sociology, and more specifically, the sociology of work (Edgall, 2010; Grint, 2005). Since industrial capitalism is one way of organising technology, work and people, it is useful to explore the elements which constitute its environment.

From the French perspective, the concept of work has been viewed as a means to provide order to society (Stroobants, 2010). Though the concept of work in the French context has followed the theories of Weber, which supports capitalism, it has nevertheless retained a contrasting perspective of employment, fostered by Marx (Méda, 2010; Stroobants, 2010). One French perspective emphasises the Marxist view which upholds that workers seek independence from managerial pressure (Linhart and Mauchamp, 2009; Méda, 2010).

The early 20<sup>th</sup> century brought labour disputes in France, notably those culminating with the strikes of 1936, which reinforced Marxist views of workers (Méda, 1995). These strikes resulted in paid leave (four weeks per year), health benefits, pensions and increased health and safety protection at work for all salaried employees (Stroobants, 2010). Throughout the remainder of the 20<sup>th</sup> century, employee rights became key factors which contributed to the French perception of work relationships (Méda, 1995; Pinçon and Pinçon-Charlot, 2007). From the French perspective, studies by Crozier (1963, 1971) argue that the interests of members of organisations can be incompatible with those of the organisation. The growth of socialism in French political life in the 20<sup>th</sup> century fostered employee protection. One example is the amendment to labour law to grant five weeks of paid leave (from four) for all salaried employees and lower

the retirement age to 60 (from 62) by former French president François Mitterrand in 1981 (Stroobants, 2010).

This suggests that the French view of the work environment, due to historical, political and social implications, emphasises the negative consequences of industrial capitalism on workers. Moreover, this indicates that workers' expectations are divergent from those of employers (cf. Crozier, 1963, 1971; Linhart and Mauchamp, 2009; Méda, 1995). From the current French perspective, Cohen (1997) argues that industrial capitalism has increased employment precariousness and lowered salaries.

Industrial capitalism has also forged the concept that work is affected by gender (Grint, 2005; Feldberg and Gledd, 1979). This suggests that gender has altered how people view work. Gender theory (Bem, 1993) argues that work can be viewed through male and female lenses. There is also a historical influence on the occupational differences between men and women (Feldberg and Gledd, 1979), such as the perception of male and female job roles. This argues that men and women have different responsibilities at home and at work. The freedom to choose work reveals that there are consequences within and outside of the work environment (Grint, 2005). This also indicates that work affects other spheres (Parry, Taylor, Pettinger and Glucksman, 2005; Thuderoy, 2010), such as non-work life.

In addition, there are indicators that work done by individuals has social effects. This suggests that the implementation of telework alters perceptions of the work environment, which until recently have focused on relations between employees and employers in a traditional workplace (referring to work carried out in the same physical location). From the French perspective this also argues that telework practice is incongruent with management methods which rely on face-to-face relationships, identified by Spony (2003) in the French cultural context. Telework, in this study, refers to work carried out away from the traditional workplace using some form of information technology (IT).

New technology, such as Information Technology, or IT, has affected the late 20<sup>th</sup> and early 21<sup>st</sup> century work environments because people are confronted with face-to-face, non-face-to-face, synchronous and asynchronous communication (Mattelart, 2001). Moreover, the information age requires workers to be able to learn how to use new forms of technology (Passet, 2000). This indicates that today's work environment relies

on the use of face-to-face and non-face-to-face communication which is more synchronous than in the past (such as the possibility of using video conferencing).

Despite this, telework practice is at odds with the French numeracy tradition, which has emphasised the use of numbers as a means to create an egalitarian society (Mattelart, 2001). This is illustrated through the emphasis on numeracy to train workers.

Theoretically, this suggests that numeracy, contrary to communication skills, increases equality in the training of people (since numeracy is more objective to evaluate and mitigates social class identity). The introduction of telework in the French work environment upsets these traditions and affects work relationships since it relies on increased communication-based channels.

Despite its growth, there have been few studies on the effect of telework in the French work environment (*Centre d'Analyse Stratégique*, 2009). Nevertheless, there is an expanding body of knowledge on the implications of different forms of flexible work, such as part-time telework (Siha and Monroe, 2006). There is also a lack of research on the effects of telework on employees and organisations (Taskin, 2010). Moreover, there are few investigations on the consequences of telework on teleworkers, their non-teleworking colleagues and line managers, such as this present study carried out at the Conseil Général du Finistère, or CGF. It is beneficial to evaluate how these consequences affect work relationships, which is discussed in the following section.

## **1.2 Relationships at work**

*Discussions in this section argue that work relationships affect telework practice*

The effects of relationships in the work environment on social life (Miller and Form, 1951) can be evaluated through the lens of sociology. Moreover, industrial sociology argues that 'industrial' activities refer to all forms of professional enterprise.

Furthermore, the social environment at work is an axis from which the effects of the work environment on the non-work environment can be explored (Pettinger, 2005; Thuderoz, 2010). This suggests that there are links which affect work and non-work relationships for employees, which is also supported by Crozier (1963, 1971).

From the French perspective, Méda (1995) argues that work is a dominating influence on social relationships because it is a means to form social organisation. Méda further argues that work does not form social relationships. Nevertheless, Méda claims that being out of work means being socially excluded. This is congruent with sociological



theories which suggest that work is a key motor for social integration. This is illustrated in the concept of ‘social exclusion’ due to being unemployed, for example (Méda, 1995). Furthermore, Méda (2010) and Linhart and Mauchamp (2009) advance that work is an important feature of social identity. This suggests that the current French perspective of work emphasises participation in a social structure.

Work relationships amongst peers are regulated by being and interacting (Pettinger, 2005). This suggests that the work environment is a venue for the establishment of work relationships. These relationships can also involve what Pettinger (2005, p. 42) calls ‘the performance of friendship’. This also suggests that organisational structures and interaction affect humans at work (Thuderoz, 2010; Watson, 2008). It is interesting to explore how these relationships are affected in a work environment which includes telework.

The collective view of relationships at work is incongruent with individual remuneration as a part of a work contract (Méda, 1995). This suggests that there is an employee/employer relationship with divergent interests, fostered by Marxist theory in the French historical context. This also indicates that individual interests are divergent from the interest of groups (Crozier, 1963, 1971; Méda, 1995; Watson, 2008). This investigation on telework at the CGF attempts to bring to light how this affects relationships amongst people who work as peers.

A recent study by Taskin and Bridoux (2010) suggests that telework can negatively affect knowledge transfer, and in turn, relationships between teleworkers and office-based workers in terms of cognitive issues (referring to common mental schemes) and relational issues (referring to the quality of relationships). Nevertheless, their study is based on theoretical arguments and does not provide empirical evidence. Furthermore, the comparisons drawn on employer-related effects of telework do not include the perspectives of line managers, which is also important to consider as key actors in an organisational context (cf. Crozier, 1963, 1971). These relationships also have effects on perceptions of working time, which is discussed in the next section.

### **1.3 Temporal aspects of work**

*This section points out how temporal aspects of work influence telework practice*

Most socially constructed temporal rhythms are based on the calendar or clock (Perlow, 1999). From a sociological perspective, this suggests that patterns exist which people

use to construct work time (Méda, 1995; Perlow, 1999). It can be argued that the traditional perspective of measuring work, completed according to temporal patterns, indicates that workers' productivity can be quantified (cf. Perlow, 1999). By contrast, Dupuy (2011) maintains that it is difficult to evaluate workers' contribution to organisations due to the sequential nature of work.

Due to the growth of flexible working arrangements (Edgall, 2010; Handy, 1996), including telework, it can be argued that temporal aspects of work are more difficult to measure since productivity is not always 'visible'. Moreover, workers' input in the telework context is difficult to evaluate because of reduced physical presence. This suggests that paying employees per working hour in the telework context, as one example, alters perceptions of work temporality.

From the French perspective, Méda (1995) argues that work is not one aspect of time, but rather work *is* time. Méda views work as a void which is filled with activities that can be divided temporally. Méda (1995) further argues that this perspective allows to more intelligently quantify work productivity. This suggests that work can be measured using non-standard means that are not only temporally-based (cf. Perlow, 1999), such as evaluating work according to outcomes, or objectives. Furthermore, in France, the introduction of the 35 hour work week in 2001 underscored the link between working time and work production (Linhart and Mauchamp, 2009; Méda and Orain, 2002; Méda, 2010). This reveals that French labour legislation is based on a temporal view of work. In turn, this can be at odds with flexible working methods, such as telework, which increase temporal flexibility for employees.

The above arguments indicate that part-time work, such as in the case of full-time workers teleworking part-time, can alter perceptions of work completed. In the case of telework, temporal advantages may outnumber disadvantages which stem from a part-time teleworker status. One example is increased temporal flexibility in schedules experienced by teleworkers. Moreover, the literature points out that the desire for increased work flexibility in the telework context may outweigh potential negative aspects, such as changes in perceptions of work relationships (Watson, 2010). It is therefore useful to evaluate these relationships from a managerial perspective, which is discussed in the following section.

## 1.4 Managerial perspectives of work

*This section discusses how managerial aspects of the work environment are affected by telework*

Taylorism (Grint, 2005), which defined work specialisation and the division of labour at the beginning of the 20<sup>th</sup> century, fuelled interest in the study of social satisfaction at work. Workplaces studied by Taylor at this time were weakly unionised and workers focused on the acquisition of rewards. This situation also generated a new perspective of the effects of work relationships on managers.

The role of a manager was later evaluated through studies by Mayo (1933) who argued that relationships between managers and workers are affected by observation. This was later called the observational, or ‘Mayo’, effect. In the 1960s, managerial practice was also influenced by motivational theorists such as Herzberg and Maslow (Stroobants, 2010). Herzberg suggested that extrinsic and intrinsic needs of workers affected motivation. Maslow argued that a pyramidal hierarchy represents sequential needs that contributed to a perception of self-satisfaction. These movements have influenced the perceptions of managerial perceptions of work today.

The French perspective of managerial roles also reposes on the work of Taylor (Boussard, Craipeau, Drais, Guillaume and Metzger, 2002) and Mayo (1993) as key contributors (Foudriat, 2011). The French nomenclature the term ‘cadre’ is an interchangeable term for manager. This employment category emanates from the French verb ‘encadrer’ which suggests maintaining order in a group (Stroobants, 2010). Moreover, this cultural view of work in the French context is reinforced by the Marxist tradition (Méda, 1995) which emphasises worker entitlement and status, according to hierarchical level.

The perception of hierarchy in professional relationships for managers in the French context, as underscored by Spony (2003), emphasises a clear distinction between managerial levels (Dupuy, 2011). This distinction is identified in managerial subcategories, such as higher level managers, or ‘cadres supérieurs,’ executive managers, or ‘cadres dirigeants’ (Stroobants, 2010). Non-managerial levels in France are referred to as non-managerial staff, or ‘non-cadres.’

Distinctions between managerial levels in France are also manifested by physical distance when speaking, vocabulary usage and collective norms (Dupuy, 2011). This is

illustrated by the use of formality in the French language which can be used to maintain social distance amongst colleagues (of different hierarchical levels) and/or between teleworkers and line managers. In French labour terms, these managerial levels are referred to as 'socio-professional categories' or 'catégories socio-professionnelles' (Stroobants, 2010), which have been used in the French labour code since 1954. Hierarchical distance, or power distance, as defined by Hofstede (1980, 1991), is high in managerial relationships in the French context.

The structural changes of the workplace that were generated by the introduction of IT have also affected the role of managers (Watson, 2008). These changes, such as the possibility of synchronous and asynchronous communication at low cost (via the internet for example), generate changes in work experiences and patterns (Dupuy, 2011). One example is the decreased dependency on managing based on face-to-face methods, such as observation. In the French context, Dupuy (2011) argues that this has led to a perceived loss of control for managers. This argues that the introduction of new management methods in the French context can upset managerial culture (Spony, 2003), such as those which emphasise face-to-face control. Since telework alters spatial and temporal aspects of the traditional work practice (cf. Parry *et al.* (2005) and Perlow (1999)), it is instrumental to explore how it affects managerial perceptions in the French workplace.

Several studies argue that telework brings advantages to employers, such as higher productivity (Halford, 2005; Illegems and Verbeke, 2004). By contrast, teleworkers can also be perceived as undervalued (Sidle, 2008). Nevertheless, there remains a lack of studies on the effects of telework in the French workplace (de Beer, 2002; *Centre d'Analyse Stratégique*, 2009). Moreover, there are few studies on telework in France in the international literature. Furthermore, there are no known studies on telework in the French public administration context, which explore managerial perspectives. This suggests that it is beneficial to investigate telework at the CGF. In order to shed light on the approach of this investigation, the next section discusses the objectives of this study.

## 1.5 Objectives

*This section reveals the key objectives of this study*

My research aims to add to the knowledge of part-time telework through an empirical study carried out on the telework pilot programme at the Conseil Général du Finistère (CGF) in Brittany, France. This study focuses on the CGF telework pilot group to investigate the effects of part-time telework from the perspectives of teleworkers and the key individuals with whom they interact, notably colleagues and line managers. The study uses role sets to examine the advantages and disadvantages for each stakeholder. The objective of this study is threefold:

- 1) To evaluate the experiences of teleworkers, their non-teleworking colleagues and their line managers at the CGF in France, using open-ended questions and attitude scales in self-administered questionnaires.
- 2) To compare and contrast the experiences of the above actors through role set analysis, using part-time teleworkers as the focal point.
- 3) To provide sets of advantages and disadvantages of the part-time telework programme at the CGF, from the perspectives of teleworkers, their non-teleworking colleagues and their line managers, through the interpretation of their interaction.

It is valuable to evaluate how difficulties experienced in the telework context are mitigated to increase work satisfaction. Moreover, comparing and contrasting experiences allows deeper insight into how teleworkers, their non-teleworking colleagues and their line managers affect one another. This is revealed in non-verbal and verbal communication, perceptions of a visually-based work environment (i.e., the traditional work place) versus a non-visually based one (i.e., telework) and the alteration of work patterns in the telework context. These issues are brought to light when the interactions of office-based workers (non-teleworking colleagues and line managers) with non-office based workers (teleworkers) are explored in one case through an exploratory case study approach (Yin, 2009). To support my investigation, the following section discusses the structure of this study.

## **1.6 Structure**

*This section outlines the aims of each chapter of this study*

The remainder of this chapter (chapter one) reveals the conceptual themes of this study and includes an introduction to the CGF and the CGF telework pilot programme. Chapter two provides a literature review, introduces research questions and discusses role set analysis. Chapter three includes the development of the chosen research methodology, an introduction to case study analysis, data collection and data analysis. Chapter three ends with a presentation of research questions for each teleworker role set holder dyad. Chapter four discusses findings consistent with the literature. Chapter five explores findings that diverge from the literature. Chapter six reveals findings relevant to the study context. Chapter seven reveals sets of advantages and disadvantages of telework from the perspectives of teleworkers, their non-teleworking colleagues and their line managers. Chapter seven also explores insights of this study and ends with a discussion of research questions. Chapter eight brings to light contributions, limitations, further research avenues and ends with an epilogue. The following section discusses the study setting.

## **1.7 Participatory organisation**

*This section discusses the background and development of this study at the CGF*

### **The CGF**

The CGF is the regional government of the ‘Département’ of the Finistère in Brittany, France. The head of the CGF is the president, elected every three years by the inhabitants of the region. The CGF has approximately 2,800 staff members, located throughout the territory to administer public services (such as social aid) and to provide support for governmental projects (such as road works). Of these staff members, 911 commute to urban centres, including those who work at headquarters in the city of Quimper. 1,154 staff members at the CGF travel more than 38,000 cumulated kilometres per year (data provided by the CGF).

The Finistère region of France is located on the western peninsula of the region of Brittany on the English Channel. Despite its Celtic roots and language (called ‘Breton’), the region identifies itself culturally and linguistically with France. This is also reflected in its work culture. The CGF maintains strong ties with the French

national government, centralised in Paris (from which all regions in the country are administered (i.e., administration of the ‘Départements,’ federal budgets and federal law)).

The Finistère region (called ‘Penn ar Bed’ in ‘Breton’) is made up of 283 communes and has a population of approximately 886,000 people (*Geobreizh*, 2010). It has a landmass of 6,729 square kilometres, with a population density of 150 inhabitants per squared kilometre. This indicates that the population served by the staff of the CGF is geographically dispersed.

Staff members at the CGF are categorised according to three grades: A, B and C. A grade staff members have managerial responsibility, B grade staff are concentrated in administrative functions and C grade staff occupy support functions, including manual tasks. The majority of commutes at the CGF are done by A and B grade staff. Moreover, all telework study participants hold jobs in these same grades.

Staff at the CGF are hired on permanent and non-permanent contracts. French labour law prohibits employers from maintaining short-term contracts for more than 24 months without offering long-term employment. Staff at the CGF are covered by French labour legislation and also benefit from French civil servant status. This status offers job stability for employees with employment protection and incentives, such as favourable retirement schemes. This suggests that the CGF staff participating in this study benefit from employment protection, which is also inherent to French labour law. Under French labour legislation employees with a fixed contract, or ‘contrat à durée déterminée’ have indefinite employee status.

The CGF is highly stratified in its organisational culture. Staff categorisation also refers to social status in the French context (Pinçon and Pinçon-Charlot, 2007). This suggests that work culture at the CGF has high levels of formality, described by Hofstede (1980, 1991) as ‘power distance,’ or perceived distance between hierarchical levels. One example is the linguistic distinction in the French language between formal and informal usage (Stroobants, 2010), as previously discussed. This reveals that French workers who display characteristics which reflect high levels of power distance (cf. Hofstede, 1980, 1991) are not as close in their hierarchical relationships vis-à-vis British workers. One example is the use of formal speech and titles in the French work context (Stroobants, 2010).

This also indicates that telework in the French context upsets cultural behaviour which is based on face-to-face relationships. This is advanced in Hofstede's (1980) earlier studies carried out on workers in the 1970s. In a recent study done in France by Dambrin (2004), it was found that telework brought hierarchical levels closer. Nevertheless, there are no known studies on part-time telework in France in a public administration context, such as the telework programme at the CGF.

### **The CGF pilot telework programme feasibility study**

The telework pilot programme at the CGF was fuelled by a feasibility study initiated by its president in 2008. The aim of the feasibility study was to retrieve feedback from staff members. The CGF launched this study for its 'Plan de Déplacement des Entreprises' (project on commuting issues for companies). The focus was to reduce commuting and to demonstrate that the CGF can be an example in the implementation of telework. The CGF, with the impetus of its president, sought to investigate and implement flexible working methods, such as telework, to serve as an example for employment practice in the Finistère region.

The initiative for the feasibility study was inspired by the report carried out for the French government on telework from the *Centre d'Analyse Stratégique* (2009), which claims that telework is underdeveloped in continental France. The president of the CGF wanted the Finistère region to be a pilot for the implementation of telework on a public administration level in France. This feasibility study was carried out by staff members at the CGF in autumn 2008 (report kept confidential at the request of the CGF). The following discussion evaluates the feasibility study to provide a background and reveals the context of the CGF telework pilot for this study.

An on-line questionnaire to follow up on the feasibility study was developed in 2008, with the support of four full-time staff members of the CGF, to ask staff at the organisation how they feel about telework and to assess their desire to participate in a telework pilot programme at the CGF. 933 staff members, or 57% of those questioned, returned completed questionnaires. Interestingly, 462 replies, or over 50% of the total reply rate, returned electronic questionnaires within the first four hours of the feasibility questionnaire launch. This suggests that there was a strong latent demand to telework at the CGF.



67% of respondents claimed that their jobs could be carried out by teleworking. 33% of respondents desired to telework two days per week (other days being present at habitual workplace), and 34% one day. 12% of respondents claimed that telework would not be feasible for even one day per week. These results suggest that staff members, for the most part, were eager to participate in the telework pilot programme. This could indicate that since the demand to telework was high, telework was already being carried out on an unofficial basis. This study, nevertheless, did not investigate if staff already teleworked (on an unofficial basis, for example). Moreover, the questionnaire launched could also have influenced informal telework uptake.

The feasibility study also revealed that 88% of respondents felt that they could work independently. This suggests that workers had independent working patterns. It would have been interesting to ask the same question to line managers to investigate how teleworkers in their team would affect manager/subordinate relationships. Furthermore, 54% of respondents claimed to use electronic systems from the CGF at their homes. If a parallel is drawn with the previous finding, it could be suggested that the 46% of staff members who claimed to connect to electronic systems of the CGF at home could have already been teleworking (e.g., on an unofficial basis). Finally, 78% of staff members claimed to be ready to participate in a telework pilot programmed at the CGF. This reveals that telework was familiar to staff at the CGF and that they were enthusiastic to participate in the telework pilot programme.

### **The genesis of the CGF pilot telework programme**

After results were collected and discussed internally at the CGF, it was decided to develop a programme pilot to last eight months, on a voluntary basis, beginning 1<sup>st</sup> October 2009. This is consistent with practice, where voluntary telework is becoming a prevalent form of flexible working (Lautsch, Kossek and Eaton, 2009). A staff member at the CGF was given responsibility as the telework pilot project co-ordinator at this time. This person was responsible for organising the pilot programme by preparing all documentation and being the key liaison between pilot participants and the central administration at the CGF.

As of 1<sup>st</sup> October 2009 the telework pilot was made up of 27 staff members in various departments of the organisation. The 27 staff members were selected from 1,715 candidates: less than 2%. Participants were required to live more than 20 kilometres from the workplace and have access to high speed internet at home. Furthermore, staff

members were volunteers. Teleworkers were given the choice to work two days per week, either at home or at a telecentre in the Finistère region (existing telecentres in the Finistère region, all of which are in offices managed by the CGF). One exception was an office used in a local town hall (provided free-of-cost for one teleworker in the programme). Each teleworker received a laptop computer and a cell phone from the CGF.

Each teleworker received a preparatory guide about telework in addition to a telework charter (internal documents used at the CGF) outlining responsibilities of teleworkers and the organisation. Each teleworker signed a contract, which outlined the individual circumstances decided upon between each staff member and line managers (e.g., days of telework, times available by phone, etc.). After the official launch of the telework pilot on 1<sup>st</sup> October 2009, two informational meetings were held for pilot participants (teleworkers and their line managers) on 19<sup>th</sup> and 21<sup>st</sup> October 2009. The end of the pilot programme, foreseen as 31<sup>st</sup> May 2010, was prolonged to end September 2010 in order for the central administration of the CGF to decide about its extension.

### **Feedback on the pilot telework programme in October 2009**

At meetings held 19<sup>th</sup> and 21<sup>st</sup> October 2009 in Quimper, the CGF telework coordinators presented feedback from the telework pilot programme participants, collected for an internal report. In the report, eleven teleworkers claimed to feel that telework had improved their productivity. Several also suggested that their IT skills improved. Line managers claimed that teleworkers were more available in case of bad weather or traffic problems.

Teleworkers indicated that they had to adjust their communication patterns with non-teleworking colleagues. Results indicate that the telework programme had a positive impact, despite ‘teething pains,’ such as resolving IT difficulties away from the office. Nevertheless, replies could be biased due to a pilot participants’ desire to remain in the programme.

By contrast, three teleworkers claimed that they suffered from a negative image of telework. The negative image suggested by teleworkers emanates from relationship difficulties (e.g., jealousy, resentment) from non-teleworking colleagues. Moreover, results point out that tension emerged when non-teleworking colleagues had to ‘bear the burden’ when teleworkers were not available in the office. Finally, non-teleworking

colleagues and line managers felt that they need to be more organised than with an office-based worker.

These experiences reveal that telework pilot participants require an adaptation period to implement the programme. In addition, replies suggest that telework upsets roles of workers, in terms of their working relationships, because of the lack of presence in the office. This also could be affected by cultural factors, such as hierarchical distance (Hofstede, 1980, 1991).

### **Feedback on the telework pilot programme and launch of this study in July 2010**

A feedback meeting on the telework pilot programme feasibility study was held in Quimper on 1<sup>st</sup> July 2010 with teleworkers, line managers, the president of the CGF, and me. At this meeting, the CGF decided to extend the pilot programme due to the positive feedback received by participants (teleworkers, non-teleworking colleagues and line managers) from the feasibility study. At this time I was granted access to formally evaluate the experience of telework at the CGF. The president of the region was eager to use the telework pilot to reveal the advantages and disadvantages of telework at the CGF.

This study seeks to explore the CGF pilot programme and shed light on issues to be addressed for the eventual long-term extension of the programme (the length of extension is under negotiation at the CGF). In this vein, three scenarios were envisaged: to generalise telework as a possibility for all staff members whose jobs are adapted to it, extend the pilot programme progressively in order to outline problem areas or extend a voluntary programme in departments which do not have teleworkers at present. The genesis of this study is rooted in my collaboration with the CGF. My journey is discussed in the following section.

### **1.8 The research journey**

*This section identifies my initial experiences during the development of this study*

I have been studying telework in France for approximately ten years. My interest in telework began with the development of a research project for a Masters of Science in Management in the year 2000 on the challenges of the implementation of telework in France. This work was done in English, based on English- and French-language sources.

I am American and French, and was educated in the English and French languages to university level (at American, British and French universities). I identify myself with the American and British cultures in addition to the French culture. Throughout my adult life, including work experience which took place in the French cultural context, I have retained strong ties with the English-speaking world (notably American and British) through my education and work. I began my professional career in Paris, France in the human resources department at a bilingual (English/French) international organisation, employing over 60 nationalities. I have carried out job duties in recruitment, training and expatriate staff management in a multicultural, bilingual context. I have also managed staff worldwide (expatriate staff located abroad). In addition, I have worked in cultural contexts outside of English- and French-speaking countries.

I have also been employed as a consultant and professional trainer in cross-cultural communication and cross-cultural negotiation in governmental institutions, international organisations and multinational corporations. Again, I did this work in English and French in multicultural contexts. I am currently employed as a lecturer in HRM at a university of applied sciences in the Swiss canton of Valais. My motivation to carry out this present study was fuelled by my interest in the cultural and social aspects of telework practice in the French context. My personal and professional experiences helped facilitate the understanding of cultural/linguistic aspects of this study.

Though I was introduced to the CGF through a professional contact (I was not employed by the organisation at the time of the study or at any other time), my involvement in the French culture and, more specifically, French work culture allowed deeper insight into contextual issues. This study is therefore based on the assumption that I interact with my subject (cf. Cepeda and Martin, 2006). Sociologists Pinçon and Pinçon-Charlot state “discussing one’s research is discussing oneself” (Pinçon and Pinçon-Charlot, 2007, p. 273). They further argue that although it is important to maintain a distance with one’s research, inevitably one becomes deeply involved with it.

I would like to introduce the concept of ‘insider/outsider’ briefly and how it pertains to my journey during this study. The ‘insider/outsider’ position, as it is called by Dwyer and Buckle (2009) suggests that I, as a researcher at the CGF, can be perceived as someone inside of the organisation (as a researcher operating within the organisation) in

addition to someone outside of the organisation (as an external researcher). In another vein, I can also be considered an 'insider/outsider' because of my bicultural/bilingual identity. This suggests that I can be perceived as a researcher who operates as a French-cultured person (as in 'insider') in addition to someone who operates as an Anglo-American-cultured person (as an 'outsider'). Dwyer and Buckle (2009) maintain that there is a space in between these 'insider' and 'outsider' roles. They call this space a 'hyphen' or 'dwelling space'. This space is what I would like to draw my reflection from in this study, and more specifically how I had to operate within it during my research journey at the CGF. I will revisit this as I reflect on my experiences throughout the study (in sections on personal reflection) and come back to it in greater detail at the end of my study in an epilogue. In order to become more familiar with the start of my journey, the next chapter discusses the extant literature on the topic of this study.

## **2. Literature review**

### **2.1 Telework**

*This section evaluates the literature on telework as a concept*

#### **2.1.1 The concept of telework**

##### **Contextual factors**

Telework alters perceptions of the traditional work environment because it increases temporal and spatial flexibility for workers. This is in contrast with the conventional understanding of the traditional work context. This also reveals that work affects the social sphere (Parry *et al.*, 2008). From the French perspective, sociologists Pinçon and Pinçon-Charlot (2007) and Méda (2010) have brought to light how work relationships are distanced, due to hierarchy, in the French cultural context. Moreover, Dambrin (2004) suggests that telework can affect the relationships between teleworkers and their line managers. It is thus instrumental to evaluate how telework is positioned in the French workplace.

##### **The French context**

In 2008, it was estimated that telework could potentially involve up to 30% of French workers (*Centre d'Analyse Stratégique*, 2009). Despite its growth in France, there have been few studies on the effect of telework and its consequences on teleworkers, their non-teleworking colleagues and their line managers. Studies, such as those by the *Centre d'Analyse Stratégique* (2009) or the INSEE (2009), are not based on specific cases, but rather on evaluating the position of telework in the French labour context and providing definitions. These statistics are inconsistent since telework is not always carried out on an official basis (such as employees who work from home evenings, weekends and whilst travelling). Moreover, these statistics are indications as there is no official definition of telework in France by its national statistical office, the *Institut National des Statistiques et des Etudes Economiques* (INSEE), nor by other governmental or private bodies. Nevertheless, they provide a useful synthesis of telework uptake in France.

##### **IT-related aspects**

Despite the continued existence of the traditional workplace (cf. Stroobants, 2010), the development of IT has opened up new possibilities for telework. It had been estimated

by the *Gartner Group* (2005) that by 2008, 41 million corporate employees worldwide would spend at least one day per week teleworking. Telework enables employees to work partially or fully from alternative workplaces such as homes, hotels and airports or during business travel. In one report, Lim (2004) suggests that there are several factors which influence the decision of companies to adopt telework. One factor is the increasing availability of broadband internet connections. Better and faster connections allow increased usage of telecommunication equipment and remote collaboration software. This suggests that telework provides greater flexibility because workers can carry out tasks in alternative locations. This can be at odds with the French perspective of work (cf. Stroobants, 2010) which emphasises face-to-face relationships (cf. Spony, 2003).

### **A research gap**

Though there are increasing numbers of arguments in favour of telework, there are few studies on these 'less visible' (Siha and Monroe, 2006; Tietze, Musson and Scurry, 2009) workers. This suggests that it is difficult to study teleworkers due to their less visible nature. By contrast, it could be argued that since telework is a benefit for employees it is in their interest to demonstrate that they are successful teleworkers. This is endorsed by the Mayo effect (1933) which suggests that workers demonstrate better performance when under observation. Despite this, Sidle (2008) argues that teleworkers can be seen as undervalued.

### **Attempts to define telework**

The terms telecommuting, telework and distance/remote work are interchangeable expressions which refer to work carried out at a distance and linked to some type of organisational structure (Pinsonneault and Boisvert, 1996). Conversely, telecommuting (often used in the US context) is not confined by time or space. In other words, telework can be carried out asynchronously and, due to its independent nature, is not restricted to standard working hours. Other terms that have been used to describe telework include remote work and mobile work (Johnson, 1997). This suggests that telework definitions are encompassed by spatial and temporal aspects. Nevertheless, there is no clear consensus in terms of commonly used terms to describe telework activities.

A debate in the literature persists to define telework as a concept (de Beer and Blanc, 2000; Shin, Sheng and Higa, 2000). Though there is no agreement in the literature on what telework is, there are some common features. For example, Johnson (1997) states that telework is a partial or complete use of information technology at a distance that allows people to access labour activity. Telecommunication facilitates telework by allowing employees to work outside of office settings. Previous discussions suggest that telework is related to work activity outside of the traditional workplace, using some type of IT. In accordance with section 1.1, the general definition of telework used in this study is ‘work carried out (often via electronic means) partially, or completely, away from the usual place of business.’ The concept of telework can also be categorised, which is discussed in the following section.

### **2.1.2 Telework categories**

#### **Key perspectives**

Categories of telework include: telework from home (home-based work), satellite offices, neighbourhood work centres (telecentres) and mobile work (Pinsonneault and Boisvert, 1996). Other categories include: concentrative teleworking, offshore telework, work done in televillages and nomadic teleworking (ETO, 2000). This indicates that although telework categories are varied, there is an emphasis on the spatial aspects of work carried out away from the traditional workplace (cf. Parry *et al.*, 2005).

Despite a lack of clear definitions in the literature, home-based telework is simply defined as an employee working from home instead of at the employer’s premises (ETO, 2000). This definition, however, does not reveal when people telework. For example, satellite offices can be compared to mini-divisions of companies (Johnson, 1997), where employees work at regular or irregular times. They are meant to reduce commute times, either from home or from other worksites. Neighbourhood work centres (also referred to as telecentres) provide local offices to employees who wish to avoid the cost, time and inconvenience of commuting (ETO, 2000). Mobile work allows people to use ‘on-the-road services’ such as extended stays at customer sites. This suggests that telework categories are defined in terms of temporal aspects (cf. Johnson, 1997) which suggests that telework working hours are irregular. This also affects the sequential nature of work (cf. Dupuy, 2011) and assumes an equitable division of work tasks according to time (cf. Parry *et al.*, 2005).



### **Teleworker characteristics**

Though the above descriptions of teleworkers in the literature are divergent, the characteristics of teleworkers include the use of a personal computer in the course of their work, telecommunication links (e.g., telephone/fax/email) to communicate with their colleagues or supervisor, maintaining a salaried employee or self-employed status and a main working place at the contractor's premises (ETO, 2000). Furthermore, telework experts and practice indicate that not only are certain work categories suitable for telework, but also categories of people (Huws, 1993; Johnson, 1997; Pinsonneault and Boisvert, 2001). Teleworkers can be categorised according to the amount of time they spend teleworking, as suggested in previous discussions. This is supported by Parry *et al.* (2005) who argue that work is traditionally divided temporally.

### **Teleworker categories**

Categories of teleworkers can be described as marginal, substantive and dominant (Johnson, 1997), self-employed or freelance, informal or illicit and entrepreneurial (ETO, 2000). Marginal means work done for less than half of a work schedule, substantive for more than half of a work schedule and dominant for the majority of a work schedule. This reveals that teleworkers are categorised according to time spent teleworking in addition to the type of telework performed. Nevertheless, this also suggests that since the nature of telework is less visible (cf. Silva *et al.*, 2009), teleworkers are less visible by employers and/or colleagues in the workplace. This indicates that there could be other telework categories.

### **Employment status of teleworkers**

Teleworkers can also be categorised according to employment status. Self-employed teleworkers rely on an independent administrative status (Johnson, 1997). Illicit teleworkers are workers who telework and are not recognisable to employers. In addition, telework can be carried out on full-time, part-time, permanent and non-permanent bases (Pinsonneault and Boisvert, 1996). This suggests that teleworkers can be workers who participate in formal telework programmes in addition to those who perform informally. By contrast, it may be difficult to census these teleworkers, since they are unrecognisable.

Self-employed or freelance teleworkers are sometimes members of telework affiliations (such as internet-based organisations) to network and find jobs. They can also develop

relationships with employers who provide work on a regular basis. Since many of these networks are on the internet and are informal by nature, it is difficult to ascertain typologies of teleworkers. This suggests that there may be many more teleworkers than identified in official statistics. Conversely, it could be argued that these types of workers have an interest to make themselves known as teleworkers, since their livelihood depends on their affiliation with networks (such as internet-based organisations).

Entrepreneurial teleworkers can start their own business from home in order to avoid the costs of an office, and sometimes office staff (Johnson, 1997). Informal teleworkers (i.e., people without formal recognition of it as a mode of working) are people who carry out home-based work without formal company approval. For example, some employees work at home without a formal agreement. There could thus be a latent demand for telework from employees since telework is already taking place. This also indicates that since telework takes place on an informal basis in organisations, available statistics are incomplete.

### **Temporal factors**

Marginal teleworkers work from a telework site for at least one day per week. Substantive teleworkers do so for two or more days per week, such as in the case of the CGF. Dominant teleworkers use telework as their primary mode of employment (Johnson, 1997). These last two categories for teleworkers have changed little since the term first used by Johnson in 1997. It is important to note that since telework is not always reported and studies have been relatively limited, there remains a failure to clearly distinguish what a teleworker is. Therefore, it is interesting to evaluate if telework is defined by the number of hours worked or according to location. Despite this, there is little consensus in the literature to support a strictly temporal or spatial perspective. Nevertheless, the literature argues that telework definitions should encompass a variety of factors, and should also take into consideration work trends (e.g., new uses of IT at work).

The above discussions indicate a lack of convergent factors to define teleworker categories, except the distinction between work location and telework temporal factors, such as within dominant and marginal categories. For this reason a fairly broad definition of telework encompassing these two dimensions is used in this review.

Telework also has specific effects in the French context, which is revealed in the next section.

### **2.1.3 Telework in France**

#### **Statistical indicators**

In 2009, 75% of men and 66% of women (ages 15-64) in France were in employment (INSEE, 2010). The average work week (in number of hours) in France in 2009 for men and women was 39.4 full-time, and 17.3 part-time, respectively. Moreover, approximately 6% men and 30% women in 2009 were part-time workers in France.

In 2008, the INSEE (2009) claimed that 22% of the French working population teleworked. It defines telework as ‘work carried out at least one-half day a week outside of normal work premises’ (INSEE, 2009). Nevertheless, the definition used by the INSEE (2008) excludes part-time work. This previous definition also fails to consider work done as overtime, since it does not specify telework as work within regular working hours. This suggests that definitions of telework in the French context are incomplete. This also suggests that the perception of work completed is based on temporal views, such as the number of hours teleworked (cf. Parry *et al.*, 2005; Perlow, 1999). However, since telework is growing, there is a stronger focus on its uptake in official statistics.

#### **Telework adoption in France**

A recent study by the *Centre d’Analyse Stratégique* (2009) carried out for the French prime minister indicates that 8.9% of the French full-time working population teleworked more than 8 hours per month (for the period 2000-2010). This study, however, fails to provide insight into the practice of telework on a part-time basis. Another article claims that 7% of French workers telework (*Ouest France*, 2010b). This study also fails to distinguish part-time teleworkers from full-time teleworkers. Moreover, although it can be argued that the French workforce lags behind other countries in terms of telework adoption, there are covert teleworkers who cannot be counted because they are not included in statistics. One example is people who use telework as a means of flexibility to stay home because of transportation problems or family obligations.

## **The private sector**

French companies, such as Renault (*Ouest France*, 2010a), have recently offered telework to their employees on a part-time basis. In a recent meeting with a French minister in charge of numerical and IT issues, Nathalie Kosciusko-Morizet (*Centre d'Analyse Stratégique*, 2009), claimed that telework is not fully engraved in French labour legislation. The study by the *Centre d'Analyse Stratégique* (2009) argues that 21% of French workers are ready to telework part-time. Despite this, given the opaque nature of telework in general, it is doubtful that statistics are reliable.

## **The public sector**

However, more reliable statistics from the French public sector (*Centre d'Analyse Stratégique*, 2009) reveal that 1% of public sector employees currently telework (employees at the CGF are public sector employees). The French minister of the public sector, Mr. Georges Tron, announced in June 2010 his endeavour to develop telework in the French public administration. France has adopted telework in its legal environment on a case-by-case basis, with trade unions by signing agreements with employers. This indicates that there are exemplars for the successful implementation of telework in the French context that are sustained by governmental and private enterprise initiatives. Nevertheless, there appears to be no consensus in terms of what key factors underpin telework adoption in France.

## **A French definition**

The French definition of telework is inspired by the European Telework Agreement (*Centre d'Analyse Stratégique*, 2009), which stipulates that teleworkers are salaried workers who regularly use IT to work at a distance, not necessarily full-time. In this vein, France voted a law (text 298 voted by the national assembly on 9<sup>th</sup> June 2009), which is also largely inspired by the European telework agreement. Nevertheless, it fails to distinguish different types of teleworkers (e.g., nomad, at home or in telecentres). This suggests a lack of consensus in the French context to define telework, despite an emphasis to count working time as a means to perceive work completed (cf. Méda and Orain, 2010; Perlow, 1999). A current proposal for a French labour legislative framework to encompass telework activities is under review and requires more evidence from practice (e.g., case studies from telework programmes in France) to bring clarification. This suggests that despite a favourable legal environment to allow telework uptake, there remain numerous unknown barriers. This study can therefore

shed light on these issues and support the elaboration of French legislation through a public sector study.

The *Statistical Indicators Benchmarking the Information Society* (SIBIS) (2003) surveyed all types of teleworkers (home-based (alternating/permanent), mobile and self-employed) in the EU in 2002. The SIBIS study found that 6.3% of the French working population teleworked in 2002 (all groups included). It should be noted that the SIBIS definition of telework encompasses all telework categories (part-time and full-time) without regard to the number of hours spent teleworking. Moreover, the number of telework participants can be misleading since it also takes into account temporary workers. This indicates that telework in the French context remains a fluid concept. This is consistent with the view that the French culture emphasises face-to-face relationships at work (Spony, 2003) and that work being completed is dependent on time spent at the workplace (and perceived visually by line managers) (cf. Méda and Orain, 2010).

### **European comparisons: France's position**

A study carried out in ten European countries (Denmark, Finland, France, Germany, Republic of Ireland, Italy, the Netherlands, Spain, Sweden, Switzerland, United Kingdom) for the ECaTT in 1999 (Hotopp, 2002), provided data for home-based teleworkers. Finland had the highest number of home-based teleworkers (10.8%) and Spain the lowest (2.3%). France was second lowest (approximately 2.4%). This suggests that France has also historically lagged behind other European countries in terms of telework uptake.

Belgium and Switzerland, which share linguistic and cultural ties with France (cf. Hofstede, 1980), had telework penetration rates of 10.6% and 16.8% respectively (using identical categories of the SIBIS study) in 2002. By comparison, Denmark and Finland had rates of 21.5% and 21.8%, respectively. This suggests that at the time of the SIBIS study, France lagged behind European countries with cultural similarities.

Current statistics (*Centre d'Analyse Stratégique*, 2009) indicate that for the period 2000-2010, the following European countries had the following percentages of salaried populations that telework more than eight hours per month:

Finland:	32.9%
Belgium:	30.6%
Sweden:	27.2%
UK:	22.8%
Germany:	19.5%
France:	8.9%
Italy:	5.5%

(source: *Centre d'Analyse Stratégique*, 2009)

Though the above estimates are incomplete (not all EU countries are represented), surveys show that France has had a considerable increase in telework participation in recent years (*Centre d'Analyse Stratégique*, 2009; INSEE, 2009; *Les Echos*, 2010). Despite this, telework growth in France remains low in comparison to other European countries (*Centre d'Analyse Stratégique*, 2009). It is important to consider which factors contribute to France's relatively low level of telework uptake.

It could be argued that France and Italy, which appear to be laggards in terms of telework uptake in Europe, are comparable in terms of cultural traits in the workplace (as suggested by Hofstede (1980) in terms of power distance, or the distance in hierarchical relationships at work, as one example). Spony (2003) argues that the French work culture, contrary to the British work culture, emphasises formality in work relationships. This is illustrated by formal communication patterns used by employees in the French work context (subordinates often use formal versions of the French language when communicating with superiors (Stroobants, 2010)).

### **Hierarchical aspects of telework in the French culture**

Dambrin (2004) claims that telework can bring hierarchical levels closer in the French work culture. It can also be argued that telework alters French work culture, since it emphasises less formal communication. It can also be argued that Finland has a high level of telework uptake due to its lower power distance (e.g., closer perceived hierarchical relationships) (Hofstede, 1980, 1991) and its dense telecommunications network (*Statistics Finland*, 2010), in contrast to France. These arguments suggest that telework uptake in France is affected by cultural and technical factors. It is beneficial to evaluate how this affects employees, which is discussed in the following section.

## **2.2 Employee issues**

*This section investigates the literature on telework from the employee perspective and ends with a set of related research questions. The section thereafter (section 2.3 on employer issues) explores the literature on telework from the employer perspective and ends with a second and final set of related research questions*

### **2.2.1 Flexibility**

#### **Flexibility at work**

As previously discussed, the concept of industrial capitalism points out that technology and work can be organised in the work environment (Grint, 2005). Grint (2005) argues that work has consequences for people inside and outside of the workplace. This suggests a fluid concept of the perception of work. Furthermore, this reveals that the effects of work on people's work- and non-work lives are regulated by temporal alterations in schedules. From the French perspective, temporality is affected by cultural perceptions, such as the importance of face-to-face contact with workers (Dupuy, 2011; Spony, 2003; Stroobants, 2010).

#### **Demand for increased flexibility**

Respondents in EU studies suggest there is an increased desire from workers for more flexible working schedules, with a significant movement beginning in the 1980s (*European Foundation, 2003*). These schedules include part-time work, compressed work weeks, term-time working, job sharing, teleworking and flexible retirement (by reducing hours in periods preceding retirement) (*European Foundation, 2003*). Flexible employment practices also include variances in the days and hours of work, part-time work, accumulated working hours (on a timely basis; e.g., monthly, yearly), job sharing, temporary employment, contracted working hours and telework (Hogarth, Hasluck and Pierre, 2000). It clearly suggests, however, that there is an increased demand for more flexible work. Arguments from *Actnow flex* (2009) claim that in the UK flexible working has modified the way people work (in terms of spatial and temporal effects of flexible working). In addition, it is evident that there remains a plethora of methods in employment practices to meet the demand for flexible working, of which telework is only one.

The European Foundation (2000) describes flexible work and profiles of 'atypical work' (*European Foundation, 2000*). Classifications of 'atypical work,' according to the EF, include non-permanent employment, temporary agency work, part-time employment

and self-employment. The EF also claims that there are significant divergences in EU countries' definitions of 'atypical work.' The EF study suggests that the definition of 'atypical work' is relative because employment schemes are not homogenous in countries studied. Nevertheless, according to the EF, telework fits into categories of 'atypical work.'

### **Effects of flexible working**

Moreover, according to the EF, working conditions in the EU have worsened (*European Foundation*, 2003). This is due, in part, to ergonomic conditions and unfavourable working environments. In the EU it was found by the *European Foundation* (2000, 2003) that although flexible work began in the 1980's and has gained momentum since, the growth of non-permanent and part-time work has also brought precarious aspects to employment. These aspects include health-related issues linked to stress and physical fatigue due to increased pressure. This indicates that part-time workers increasingly accept negative aspects of their work situation in order to benefit from increased flexibility.

The literature also suggests that telework has had a positive influence on workplace flexibility (Hill, Miller, Weiner and Colihan, 1998). Workers expressed increased flexibility in organising work time and a strengthened sense of control. The study by Hill *et al.* (1998), however, does not provide data from perspectives other than those of teleworkers. Another study by Tietze and Musson (2003) suggests that home-based teleworkers distinguish clock-based working time from task-based working time, which is also supported by conventional perceptions of work time and space (Perlow, 1999; Parry *et al.*, 2005). In Tietze and Musson's (2003) study it is also argued that teleworkers can experience increased bureaucratisation. This indicates that increased work flexibility can generate undesirable aspects of employment for workers. In the case of the CGF it is useful to see how flexibility, including temporal and control aspects, affects part-time teleworkers, which is examined in the next section.

### **2.2.2 Part-time telework**

#### **A non-standard work form**

At least one study (Hamblin, 1995) argues that although working at home can be a benefit to employees, it is also a source of disadvantages. Since telework and part-time work are non-standard workforms, they can generate negative effects. This indicates



that teleworkers are non-standard workers because they are not physically present full-time during traditional working hours in the office. This is consistent with the traditional view of work time (cf. Parry *et al.*, 2005).

### **Temporal aspects**

Part-time telework, for the purpose of this review, refers to work carried out for less than 30 hours a week. It is important to emphasise the link between standard and non-standard work within the telework context. The category of non-standard work includes telework *and* part-time work. If workers who do not conform to the 'standard' work regime suffer from disadvantages, it could be argued that teleworkers will experience similar disadvantages, or more. Part-time teleworkers are atypical in these two ways. From the view of colleagues and line managers, teleworkers are part-time workers, since they can be perceived as such. This suggests that teleworkers are perceived as workers who are available part-time in the office and also part-time away from the workplace.

### **Growth of part-time work**

Current statistics reveal that part-time work has continued to gain importance in most developed countries (*The Economist*, 2005). Nevertheless, the identity of part-time workers remains unclear (Smithson, 2005). In the EU, the number of part-time workers from 1992 to 2002 increased by 18.1% (*European Foundation*, 2003). The amount of part-time work done by men and women, however, varies considerably (Edwards and Robinson, 2004; OECD, 2003). This variation indicates that more women work part-time. This assumes that part-time work increases were also influenced by the implementation of the European Working Time Directive, or EWTD, in the EU, which guarantees equal work rights for all workers (all employee categories; e.g., full-time, part-time and teleworkers). Despite this, it is unclear if the EWTD has been implemented equitably in all EU countries which have adopted it.

### **The French perspective**

One OECD report (2003) claims that approximately 14% of total employment was filled by part-time workers in France. It was also found that 80% of these part-time workers were women. In a more recent study by the INSEE (2010) it was found that 13% of the French working population worked an average of 23 hours part-time per week in 2009 (these hours are similar with the average working time of part-time

teleworkers in the CGF sample). This suggests that more women seek part-time work versus men in the French context. This is also argued by Méda and Orain (2010) in terms of the negative effects of flexible schedules when family-related services, such as crèches, are only available during traditional working hours. This also assumes that more women, versus men, take on the caring responsibilities of families (which is argued by gender role theory (Bem, 1993)). Moreover, this reflects that the objectives of employees (such as increased schedule flexibility) do not always coincide with those of employers (such as increased need for employee availability), which is argued by Crozier (1963, 1971).

### **The European perspective**

The Eurostat Labour Force Survey (*European Foundation, 2003*) found in the EU 15 that 14.1% of those surveyed worked part-time because it was impossible to find a full-time job. 31.9% of those surveyed in the same study claimed to work part-time because they wished to. 25.8% of people working part-time claimed to do so for family-related reasons. This reveals that part-time workers in the EU seek part-time work mostly for increased flexibility and to satisfy family needs.

In a previous study by the EF (2002), findings suggest that part-time work allows people to better reconcile home and work lives. Despite this, the same study found that part-time workers have fewer career and training opportunities. This could also be due to the sequential nature of work done in groups (cf. Dupuy, 2011), which requires regular contact. This suggests that although part-time work generates benefits, workers can also experience negative effects.

The Eurostat Labour Force Survey (*European Foundation, 2003*) reveals that nearly one third of part-time workers choose to do so for greater working hour flexibility. This is particularly the case for women, who are the majority of part-time workers in France (OECD, 2003). By contrast, the above figures could also be incomplete as they include all categories of workers, including temporary ones. Nevertheless, this argues that workers desire increased flexibility, which the traditional office-based workplace limits (due to the lack of spatial and temporal flexibility).

Though the EU provides the EWTD to ensure equal pay and conditions for all workers, part-time work tends to be concentrated in the secondary labour market (Eurostat, 2004) where pay and career prospects are poor. It could be posited that teleworkers in the

primary sector are likely to experience the same problems. This suggests a dichotomy in terms of working conditions in the secondary and primary sectors.

### **Comparisons with the UK**

In Edwards and Robinson's (2004) study on part-time nurses at the National Health Service, or NHS, three main disadvantages identified by line managers of part-time nurses were communication and information flow, management and supervision and work orientation. These themes are related to issues which affect part-time teleworkers in this study. More notably, the Edwards and Robinson (2004) study sheds light on the failure of line managers and part-time nurses to reach mutual benefits (Edwards and Robinson, 2004). The Edwards and Robinson study (2004) also suggests that part-time workers tend to be disadvantaged in terms of opportunities for training, development and career progression. This also creates problems for the management of part-time workers. It could be argued that part-time teleworkers experience similar disadvantages and for the same reasons.

Though Edwards and Robinson's (2004) study does not compare results to other populations, results are congruent with those found in Hoque and Kirkpatrick's study, *Non-standard employment in the management and professional workplace* (2003). Hoque and Kirkpatrick (2003) found, however, that the disadvantages linked to the marginalisation of part-time workers apparent at lower level work were also found in higher occupational levels. The examination of advantages and disadvantages from multiple perspectives, as in Edwards and Robinson's study (2004), is particularly useful in a study on part-time teleworkers in order to learn how to better manage them. This indicates that part-time workers, since they are visible part-time in the office, are similar to part-time teleworkers in this study.

### **Effects of part-time work on teleworkers**

Nevertheless, neither of the above studies indicates what effects part-time work could have on teleworkers specifically. It would thus be useful to examine a population of part-time teleworkers vis-à-vis their office-based counterparts and their line managers. This would reveal how part-time work affects teleworkers in their job responsibilities. Moreover, this would allow the evaluation of the links between part-time, office-based work (performed by teleworkers in this study) with full-time, office-based work (performed by office-based non-teleworking colleagues in this study).

In a Swedish study on part-time teleworkers in Small and Medium-sized Enterprises, or SMEs, in 2002 (Aborg, Fernström and Ericson, 2002) findings indicate that part-time teleworkers experience longer hours and increased workloads. Furthermore, in this same study part-time teleworkers spent significantly more time on the computer at home than when they were in the office. Part-time teleworkers spent more time in the office (when not teleworking) in meetings. This suggests that part-time teleworkers are disadvantaged in terms of workloads, despite their increased temporal flexibility. Aborg *et al.*'s study (2002), however, does not provide comparisons with part-time teleworkers' counterparts, such as colleagues and/or line managers. This can be explored in this present study on the CGF telework programme. Moreover, it is unclear if part-time teleworkers in the Swedish context share strong cultural links with part-time French teleworkers (Hofstede's (1980, 1991) power distance index reveals that French and Swedish cultures are different in terms of perceptions of hierarchy at work). Nevertheless, it is beneficial to evaluate how part-time telework affects work culture in the French context, which can be brought to light in this study.

Since telework is carried out on a part-time basis in the CGF sample (all workers in the sample held full-time posts and worked on-site when not teleworking), it remains unclear if there are unique sets of advantages and/or disadvantages for them. This is illustrated by the dual status of part-time teleworkers in the CGF sample: part-time teleworkers can be considered part-time office-based workers in addition to part-time non-office-based workers. This dual status affects teleworkers' perceptions of home/work boundaries and satisfaction, which are explored in the following section.

### **2.2.3 Work/life balance and employee satisfaction**

#### **The concept**

The term 'work/life balance' was coined in 1986 (Lockwood, 2003). Kanter (1977), in her seminal book *Work and Family in the United States: A Critical Review and Agenda for Research and Policy*, was one of the first to bring the work/life balance concept to light. The main thrust of the work/life balance movement was to support families, notably for women with children. During the 1980s, companies primarily in the US began to introduce initiatives to promote well-being in the workplace (Lockwood, 2003). The work/life balance initiative was significantly fuelled in the academic world through Schor's (1991) influential study *The Overworked American*. She posits that there is a trade-off between employee requirements (such as job satisfaction and pay)

and employer needs (such as improved productivity and financial returns). This is consistent with arguments from Grint (2005) and Pettinger (2005) which suggest that work life is affected by social life. This upholds that work/life balance is one motor for telework adoption.

Though debated for over 20 years, work/life balance remains an unclear concept. Within the spectrum of flexible working arrangements, telework has anchored a position, although studies fail to show parameters within which optimal use of telework could have a positive effect on work/life balance for employees and employers. Telework can have a positive effect on family life (Fagan, 2002; Shallenbarger, 1997) through more flexible schedules, as one example. By contrast, and as previously discussed, Tietze and Musson (2003) found that telework at home generated increased levels of bureaucratisation, since there was a need to separate 'home' and 'work.'

### **Links with telework**

One of the key reasons which influence telework from the employee perspective is the desire for better work/life balance as a means to reconcile work and home obligations (Felstead *et al.*, 2002). Conversely, work/life conflict (Madsen, 2006) refers to teleworkers' inability to meet these obligations. Thomson (2008) posits that in the UK work/life balance initiatives emphasise the ability to meet work and home obligations for childcare, disabled person care and/or elder care. He further argues that UK legislation can discriminate against people who do not fit into these categories (such as people with personal obligations unrelated to the above). A study by Hamblin (1995) found that 51% of secretarial staff would choose working at home, and further home-based work demands stemmed from those looking for employment. In the case of telework, Tietze and Musson's (2003) study suggests that some home-based teleworkers in their investigation of 25 households needed to maintain boundaries between home and work (whilst teleworking at home). This argues that part-time home-based teleworkers experience different work/life boundaries versus full-time office-based workers. This nevertheless reveals that work- and non-work lives of employees affect each other (cf. Pettinger, 2005).

### **The French context**

It is unclear if study results discussed above can be extended to the French context, since there are notable differences in the roles of private enterprise and the state in the

delivery of work/life balance benefits for families (Daft and Rake, 2003). It is argued that the French state is perceived as the primary provider of work/life balance-related benefits. This suggests that despite high levels of governmental protection in the French work context (Stroobants, 2010), employees in France nevertheless desire higher levels of work/life balance (Linhart and Mauchamp, 2009), which telework can provide.

### **Effects of temporal flexibility on work/life balance**

According to the *Baseline Report on Work/Life Balance* (Hogarth *et al.*, 2000), flexible working time arrangements are a key component of the debate on work/life balance. It was also found that there is a significant latent demand for flexible working from workers for greater work/life balance (over 2,500 workers surveyed in the UK) in this British study. Findings from Thomson (2008) in the UK context echo this. In addition, a recent US study (Madsen, 2006) indicates that home-based, part-time teleworkers experience lower levels of work/life conflict. By contrast, a recent study by Morganson *et al.* (2009) argues that home-based workers experience similar levels of work/life balance support and job satisfaction as office-based workers. Their findings, however, were restricted to one organisation. Despite this, their findings suggest that work/life balance is related to employees' ability to flexibly choose their work location, which is one caveat of telework.

### **Gender effects**

Since there is a lack of clear indicators in the literature, it is important to investigate factors which support work/life balance initiatives. For example, one of the major thrusts of the work/life balance movement is the participation of women in the paid workforce (Hogarth *et al.*, 2000) and the need to manage convergent home and work lives (Felstead, Jewson, Phizacklea and Walters, 2002). Other factors that can influence work/life balance include the existence of atypical working (including telework), the growth of the part-time workforce, longer working hours, work-related stress, childcare needs, the ageing population and its demand on workers for parent care and work/life conflict (including psychological and physical effects).

This is also advanced by Morganson *et al.* (2009) who argue that spatial flexibility also positively affects work/life balance levels for workers. It is clear from the literature (Burke 2000, 2001; Hogarth *et al.*, 2000; Lockwood, 2003; Nieto, 2003; Scheible, 1999) that at least three main forces have continued to shape the notion of work/life

balance: working hours, the flexible workplace and the role of women in the workplace. These three forces have also shaped the telework landscape, as previous discussions suggest.

### **The links between work life and non-work life**

Zedeck and Mosier (1990) describe five models used to explain the relationship between work life and non-work life:

- the segmentation model (work- and non-work life have no influence on each other)
- the spillover model (work- and non-work life can influence each other in a positive or negative way)
- the compensation model (what is lacking on one sphere can be replaced in the other)
- the instrumental model (activities on one sphere can facilitate success in the other)
- the conflict model (difficult choices must be made and result in significant overload)

Research on work/life balance remains eclectic. The main resource for European-wide investigations on work/life balance is the *European Foundation for the Improvement of Living and Working Conditions* (2001). One survey, *Gender, Employment and Working Times in Europe* (European Foundation, 2001) found divergent preferences from workers such as the desire to work fewer hours for lower pay (45% of study participants) and a preference from men for a 37 hour work week and women a 30 hour week. This assumes that women play the family care role and that they desire increased work/life balance (which can be generated, as one example, by fewer working hours), identified by gender theory (Bem, 1993). It remains unclear to what extent workers are willing to give up benefits, such as fewer working hours and higher pay, for increased work/life balance generated by telework.

### **Effects of the 35 hour work week in France**

One study reveals that the 35 hour work week is a recent example of France's attempt to reduce work hours and affect work/life balance (Méda, 2010). The *Loi Aubry* (Aubry Law) of 1998 and 2000 reduced statutory working hours per week from 39 to 35 as of

1<sup>st</sup> January 2000 for companies with more than 20 employees and as of 1<sup>st</sup> January 2001 for others (*European Foundation*, 2003). The introduction of the 35 hour work week forced employers to negotiate with social partners on a variety of issues such as the annualisation of work-time, part-time work and the organisation of annual and overtime leave (Fagnani and Letablier, 2004; Méda, 2010). This suggests that the 35 hour work week has brought into question work-related aspects unrelated to working time (such as organisational difficulties due to increased absences). This also reveals the dependence on the spatial and temporal division of work (Parry *et al.*, 2005). Moreover, this situation has generated tension between employers and employees because renegotiation of workers' benefits can also translate into increased disadvantages for employees (such as the renegotiation of employee benefits triggered by the negotiation of the 35 hour work week).

Nevertheless, in France, telework adoption as a reason to maintain work/life balance may not increase due to the 35 hour work week policy implemented in 2000 (Fagnani and Letablier, 2004) by the French government. Despite the shorter work week, there are also lower levels of flexibility for workers. Though studies are scarce on the subject, it has been claimed that the 35 hour work week has brought 'stretched' working times for staff who work with long, inactive periods during the day (Méda and Orain, 2002). This, in turn, translates into longer hours, which are often incompatible with family obligations and without higher pay (Linhart and Mauchamp, 2009). This indicates that the shortened work week in France does not always translate into more free time for employees. Furthermore, fewer working hours can also generate schedule complexity.

Other studies have argued that the concept of work/life balance in the French cultural context generates mistrust since the state is the primary provider of family-related needs. The literature reveals that in the French culture, it is perceived that the French state holds responsibility for French children and their social integration (Daft and Rake, 2003; Stroobants, 2010). This can be illustrated by the attempt of the French state to intervene structurally and through legislation to enact the 35 hour work week as a means to 'enforce' a state-inspired form of a work/life balance initiative (Fagnani and Letablier, 2004; Linhart and Mauchamp, 2009; Méda and Orain, 2010). It remains, however, unclear whether advantages outweigh disadvantages for employees, when all factors are taken into account (such as lower pay for more free time), since the French legislation has not voted any amendment on working time since the 35 hour work



week's adoption on 1<sup>st</sup> January 2001. This is consistent with arguments from Crozier (1963, 1971) which maintain that perceived advantages and disadvantages of employees can be different from those of employers.

Despite this, the implementation of the 35 hour work week has experienced growing pains since it has not yet been unanimously accepted by all sectors of the economy, notably some labour unions. It was also found that the 35 hour work week has had opposing impact on work/life balance: surveys of employees show that their quality of life had theoretically improved but their working pressure had intensified and that hours were more irregular (Fagnani and Letablier, 2004). This could, by contrast, increase demands to telework.

### **Cultural perceptions**

Though gaps remain in the literature, it was generally found that most people who needed more personal time are working women with young children (Méda, 2010; Thomson, 2008). By contrast, it is suggested that men spend more time in the workplace. In the case of a working culture based on presence, women are disadvantaged in terms of work/life balance due to their non-standard status. Again, this is endorsed by gender role theory (Bem, 1993), which claims that women feel that family roles are more important for them than for men. Furthermore, the implementation of a work week based on time spent on work accomplished, as is the case with telework, rather than time spent in face-to-face contact, also affects the perception of work/life balance in France. This indicates that in the French culture, face-to-face contact remains important (Hofstede (1980), Spony (2003) and Stroobants (2010)). It can be concluded that France's measures for increased work/life balance, the 35 hour working week being a leading factor, can produce undesirable repercussions for employees, such as difficulty managing schedules (Méda and Orain, 2010). Repercussions can be affected by gender, which are probed into in the next section.

#### **2.2.4 Gender**

##### **Contextual factors**

Conventional wisdom argues that people who seek to telework are educated since they perform work that requires technical training (e.g., training to use IT tools). It was found in one study by Felstead *et al.* (2002) that 52.2% of those who could work at home held degrees (based on the UK). Another study on teleworker characteristics

(Haddon and Brynin, 2005) claims that most teleworkers are high-status workers. This upholds that there are more than just status boundaries. It is also important to investigate why women and lower status workers are at a disadvantage when requesting telework.

In the literature, based on US studies, in the 1980s most teleworkers were women who needed to persuade their employers to allow them to work from home in order to care for children (Pratt, 1984). This is supported by the assumption that work life is affected by non-work life (Pettinger, 2005). There was, however, a dramatic change in the identities of teleworkers in the 1990s. A wide range of professions were represented in telework populations at this time (Venkatesh and Vitalari, 1992). Professionals chose to work from home in order to avoid interruptions. Working at home also allowed workers to take advantage of 'lost' time. This suggests that changes were facilitated by the emergence of the information age and the internet boom.

### **The influence of telework on gender**

In the 1990s, reasons for teleworking evolved. Telework was not as gender-based as in the 1980s. Furthermore, Hotopp's study (2002) observes that most people allowed to telework in the UK were men. Despite the lack of clear definitions in the literature, some significant trends in employment flexibility in Europe, in terms of gender, were found by the *European Foundation* (2000) over a five year period (1995-2000), with a sample size of 21,500 people. These trends indicate that:

- men tend to have full-time jobs
- men are more likely than women to be self-employed

It remains, however, unclear whether there are links between full-time employment, self-employment, and gender. Since more men have full-time jobs, it is assumed that women are disadvantaged in terms of employment, independent of teleworker status. This assumes that women carry the role of carer in the nuclear family. Moreover, this suggests that women experience less workplace flexibility (of which one form is telework). In the literature it also remains unclear how work categories are linked to gender in the telework context. The literature attempts to explain the propensity to telework for men and women, yet fails to show if the work itself (e.g., work tasks) is male- or female-dominated, as discussed in the following paragraphs.

## **Employment indicators from a gender perspective**

Despite the lack of available research, it was found in Hotopp's (2002) study that a large proportion of teleworkers are self-employed and that the majority of self-employed teleworkers are men. The study does not reveal, however, the reasons why men and women have full-time jobs and/or are self-employed and what link this has to their desire to telework. It would thus be useful to examine the link between male/female working schedule needs and what men and women sacrifice in order to accept employment. The gender literature argues that part-time work exacerbates undesirable effects for women (Smithson, 2005). This could be paralleled with part-time telework for full-time employees since they could be considered as part-time workers in the view of full-time office-based staff.

It was also shown in Hotopp's (2002) study that there is a larger pool of potential female teleworkers (18.4%) versus male ones (14.7%) (*Institute of Employment Studies*, 2001). There is, however, a failure in the literature to provide data on the differences between female and male teleworkers in France. Though it is difficult to generalise findings in terms of gender on case studies, it can nevertheless be suggested that since teleworkers are mostly female at the CGF, results can reflect experiences with telework from a female perspective (participants were asked to identify their gender in questionnaires in this study).

## **Perceived identities**

Wilson and Greenhill (2004) argue that telework genders identities and roles. This indicates that female teleworkers retain higher home workloads than men, which is maintained by Bem (1993). Grandey, Cordeiro and Crouter (2005) posit that female job satisfaction is dependent on women's ability to mitigate work/family conflict. This is also advanced by Feldberg and Gledd (1979) and gender role theory (Bem, 1993) which claim that women emphasise family roles in social identity more than men. This suggests that despite the increase of female participation in the workforce, including telework, women have more family/carer responsibilities. Wilson and Greenhill's (2004) study does not, however, compare findings with non-teleworking colleagues. Furthermore, findings are discussed in an Anglo-American context. By contrast, this study on telework at the CGF attempts to investigate telework issues in the French context using literature from international studies.

## **The French perspective**

Statistics show that women in France benefit from high levels of employment (Eurostat, 2004). High levels of female employment in France can be explained in part by high levels of job protection and government-administered childcare (Bonavita, 2004). French women benefit from high levels of workplace support for child rearing such as job protection and government-subsidised childcare facilities. These 'privileges' can also lead to a rigidity in the employment scheme, such as restricted working hours for women due to childcare availability or women taking lower-paying jobs due to less time available than men to work longer hours (Méda, 2010). This suggests that compressed work weeks can make family-related schedules more difficult to manage.

As previously discussed, in France, 66% of women aged 25 to 54 in 2009 were employed (INSEE, 2010). It is not until French women have a third child that female employment rates decrease (Bonavita, 2004). These figures, however, fail to take into account the reasons why women work (e.g., financial reasons, family obligations (single motherhood)). It is thus useful to explore the reasons behind demands from women in France to telework.

From one angle, one could consider this situation a barrier to the development of female employment in France. From another angle, alternative examples in other European countries exist. Denmark and Sweden both have higher telework participation than France (Eurostat, 2004) and high levels of female employment, 79.2% and 80.1% respectively (women aged 25 to 54 in 1999). This suggests that there is also a flexible work culture linked to male and female job roles. This also points out that men and women in France have different desires to telework, and different demands for working hour flexibility. This perception of flexibility also has repercussions for non-teleworkers, which are revealed in the next section.

### **2.2.5 Effects on non-teleworkers**

#### **Relationships at work**

The literature suggests that it is important for teleworkers to consider effects of telework on non-teleworkers (Felstead *et al.*, 2005; Golden, 2007; Pöryiä, 2009). Though this branch of the literature is recent, findings from Golden (2007) argue that telework alters work interactions for non-teleworkers and negatively affects non-teleworker work satisfaction. Time is the moderating factor (cf. Perlow, 1999). This means that

increased time spent away from the office by teleworkers can generate negative effects on office-based colleagues. This is echoed in one study by Pöryiä (2009) who claims that workers collaborating virtually felt it was important to maintain face-to-face communication. Golden's (2007) study and Pöryiä's (2009) study, however, do not take into account the effect of telework on non-teleworking managers.

### **Office tension**

Other research, such as that by Felstead *et al.* (2005), suggests that telework can create tension for non-teleworkers. Their research, however, does not take into account cultural perspectives, which can also affect international samples, such as those at the CGF. Felstead *et al.* (2005) also claim that telework can generate feelings of jealousy for non-teleworkers, which is also endorsed by Frauenheim (2006), who suggests that telework may negatively affect office-based workers and fuel their turnover intentions. Neither of the above studies takes into account hierarchical relationships in the French cultural context, which is one aspect of telework that can be investigated in the CGF sample.

### **Hierarchical effects**

Dambrin (2004) suggests that telework in the French context can positively affect hierarchical relationships between teleworkers and their line managers. Dambrin also reveals that teleworkers can benefit from these closer relationships in the French telework context. Moreover, it could be useful to study telework's effects on non-teleworkers through the lens of line managers involved in a telework programme. This is echoed in the literature by Taskin and Devos (2005) who suggest that it is important to evaluate the relationships between line managers and teams in the telework context.

### **Network building**

Another branch of the literature emphasises the need for teleworkers to maintain relationships at a distance (Ward and Shabha, 2001). They recommend that more research be carried out in large organisations to evaluate this. It could be useful to renew the study in a different context to obtain recent results and pick up depth in another context. In this vein, networking effects are important to consider since office-based workers benefit from more contact with networks than teleworkers (Bennet, Owers, Pitt and Tucker, 2009). This indicates that office-based workers are more 'in the know' because they are more physically present in office-based networks (cf.

Felstead *et al.*, 2005). This also suggests that the work environment is socially structured, which is observed by Grint (2005).

### **Communication**

In addition, the literature suggests that teleworkers are negatively affected by lack of communication with office-based workers (Felstead *et al.*, 2005; Hill, Miller, Weiner and Colihan, 1998; Huws, Korte and Robinson, 1990). By contrast, one study by Akkirman and Harris (2004) argues that virtual employees are more satisfied with organisational communication (including interaction with co-workers) than office-based staff. The above studies, however, do not evaluate the effects of telework on non-teleworkers through a tripartite lens, such as in this study, which includes the perceptions of teleworkers, their non-teleworking colleagues and their line managers.

### **Effects on productivity**

Bennet *et al.* (2010) argue that although networking effects are yet to be determined in many organisations, they can play a role in the increase of employee productivity. If this argument is extended to the telework context, it can be argued that since teleworkers are less involved with social networking at the office, office-based workers can benefit from this (i.e., office-based workers are more ‘in the know’ (cf. Felstead *et al.*, 2005)). One New Zealand study claims that it is important to consider social interaction and knowledge sharing (Jacobs, 2004) when managing communication within virtual workforces. Though Jacobs’s (2004) study concentrates on communication patterns in dispersed technical workforces, results can be applied to workers in the telework context since they communicate with office-based colleagues, without face-to-face contact. This suggests that telework affects the relationships between teleworkers and their non-teleworking colleagues because teleworkers have less interaction due to spatial and temporal differences.

### **Integration effects**

Felstead *et al.* (2005) claim that office-based workers can be disadvantaged in terms of receiving work since they are ‘present.’ This is endorsed by a study from Fulton (2002) on librarians in Dublin, who claims that office-based staff working with teleworkers do extra work, since they also need to coordinate duties from the office for non-office based staff (such as sending information from the office and keeping teleworkers up-to-date). Though this study viewed a sample of 20 teleworkers and non-teleworkers, it did

not take into account line managers' views. Moreover, this study is limited to the Irish context. This suggests that office-based staff can nevertheless 'bear the burden' when teleworkers are not present.

Pyöriä (2009) evaluated the effects of virtual collaboration in the Finnish context and argues that workers in knowledge-intensive workers value face-to-face interaction and informal contact with colleagues. Pyöriä reveals that regionally distributed work has similarities with telework. Furthermore, her study claims that the problem of co-operation is 'problematic' (Pyöriä, 2009). This suggests that the exchange of information between workers cannot be replaced completely by electronic means. Though this study is limited to the Finnish cultural context and does not directly draw conclusions on the experiences of teleworkers, a parallel can be drawn with other arguments in the literature which claim that collaboration between teleworkers and non-teleworkers is an important factor for telework success (Felstead *et al.* 2005; Fulton, 2002; Golden, 2007; Jacobs, 2004; Taskin and Bridoux, 2010; Ward and Shabha, 2001). This also has effects on perceived qualities of teleworkers, which are examined in the next section.

## **2.2.6 Teleworker qualities**

### **Perceptions of ideal qualities**

A number of studies have attempted to identify personal qualities required for a 'successful' teleworker. Many emphasise qualities linked to personality traits and skills. Home-based teleworkers responding to Baruch and Nicholson's (1997) survey in the UK cited the following qualities: 45% self-motivation, 42% the ability to work alone, 29% tenacity, and 29% being organised. Two other factors of telework identified were: 37% a need for a social life and 35% a need for supervision. Mike Johnson (1997) in his book *Teleworking in Brief* cites the following desired characteristics for teleworkers: organised, goal-oriented, effective at controlling distractions, independent, effective communicator, able to easily work without office support systems.

Other commonly cited traits include the ability to be focused on self-management skills such as: organising work schedules, establishing priorities, meeting deadlines, and self-assessing performance (Chapman, Sheehy, Heywood, Dooley and Collins, 1995).

Reilly (1997) also ranks motivation, self guidance and technological literacy as important. This suggests that there are generally accepted sets of traits which constitute

the profile of a 'successful' teleworker. By contrast, due to the non-visible nature of telework, these traits can be less apparent. This can, in turn, fuel the perception that teleworkers are undervalued (Sidle, 2008).

### **Personal situations of teleworkers**

The literature also reveals teleworker qualities linked to personal circumstances. Pinsonneault and Boisvert (2001) found that individual characteristics suited for telework include: having more social contacts aside from family and work (Baruch and Nicholson 1997; Humble, Jacobs and Van Sell 1995; Richter and Meshulam, 1993), having a trusting relationship with his/her supervisor (Baruch and Nicholson 1997; Weiss, 1994) and not having a tendency to overwork (Alvi and MacIntyre, 1993). Haddon and Brynin (2005) claim that telework can be viewed through the lens of job practice as 'social construction' (Haddon and Brynin, 2005, p. 34). This reveals that teleworkers, in addition to sets of desirable traits, also require the ability to maintain effective personal and professional relationships.

### **A French view**

In the French context, the *Centre d'Analyse Stratégique* (2009) suggests that the most significant barrier for successful telework is the lack of acceptance of telework as a bona fide work method. Furthermore, the *Centre d'Analyse Stratégique* also argues that being able to work alone and not overworking are important for teleworkers to anticipate. This suggests that desirable teleworker 'traits' in the French context do not differ from the available literature on teleworker qualities. Nevertheless, this indicates that culture factors, stemming from the lack of acceptance of telework, affect teleworkers.

### **Desirable characteristics**

Despite the above findings, there is no clear stream in the literature to define what characteristics are required to telework, nor clear categories of work, despite the generalisations from the above studies. The studies which have been done attempt to outline possible 'key' attributes. Despite this, there are no reliable guidelines. The studies in this section were, for the most part, based on in-company questionnaires (Baruch and Nicholson, 1997), which can provoke bias from respondents (since continuing to telework may be in their best interest) and be culturally affected. This is brought to light in studies on culture's effect on the workplace by Hofstede (1980,



1991) which argue that work-related behaviour is affected by culture. In the French context, it is suggested that teleworker qualities are difficult to define since there is a lack of understanding of what telework represents culturally and socially (*Centre d'Analyse Stratégique*, 2009). Moreover, telework brings into question French work culture practices, which emphasise face-to-face contact, which is pointed out by Hofstede (1980, 1991) and Spony (2003). The following section reveals research questions related to previous discussions.

### **2.2.7 Research questions revealed from this section**

The following set of research questions emerged through the investigation of the literature from the employee perspective. These questions represent the key gaps which are pointed out in the available literature on telework and telework in France at the time of this study. They are questions used to investigate related issues in the form of a questionnaire to study participants (to be discussed in chapter three).

**Question 1:** How does telework affect working conditions?

**Question 2:** How does telework affect non-teleworking colleagues?

**Question 3:** How does telework affect careers?

**Question 4:** How does telework affect work/life balance?

**Question 5:** What qualities do employees feel are important to be a successful teleworker?

The following section probes into the effects of telework on employers.

## **2.3 Employer issues**

*This section evaluates the literature on telework from the employer perspective and ends with a second and final set of related research questions*

### **2.3.1 Technical issues**

Technical issues in this section refer to workplace infrastructure (such as in-company IT structures), hardware and software used by teleworkers.

#### **The role of IT**

Referring to discussions in chapter one, the introduction of IT methods that allow for increased non-face-to-face communication, such as email, have altered the management

of workers (Dupuy, 2011). Changes in the technical aspects of workplace tools have had effects on how people are managed (Watson, 2008). Little is known about how these changes affect people, such as teleworkers, who have less contact in the office (and need to resolve technical difficulties at a distance). In this vein, Taskin and Bridoux (2010) suggest that knowledge transfer between teleworkers and their colleagues decreases since they have less contact in the telework context. It is thus utilitarian to evaluate the effects of technical issues on teleworkers and their non-teleworking colleagues in the telework environment.

### **Off-site working**

Relatively little is known about the effect of off-site technical working conditions for teleworkers (Ng, 2010). It is argued, however, that reliable hardware and internet connections are key considerations for successful telework (Barron, 2007). From a UK perspective, *Actnow flex* (2009) argues that technical advances make flexible working (including telework) possible. The slow implementation of IT in France could be one barrier to telework adoption for employers (*Centre d'Analyse Stratégique*, 2009). This is contrasted by a study which asserts that broadband uptake is not primarily affected by governmental factors (de Ridder, 2008). Nevertheless, there is a lack of quality IT access in continental France (*Centre d'Analyse Stratégique*, 2009). It is also suggested that IT is one barrier in France for telework adoption because workers are not fully functional using available tools, especially in rural areas. This indicates that telework relies on IT connections. This also indicates that France lags behind other developed countries in terms of IT connectivity (internet/PC access and IT literacy).

### **A French view**

It is estimated that 35% of French people aged 16 to 74 cannot use basic IT tools with the internet (Eurostat, 2006). According to de Ridder (2007), in his study for the OECD on member country internet penetration, France ranked 13<sup>th</sup> out of 29 countries (29 OECD member countries at the time of the study). Penetration was ranked according to the number of broadband subscribers per 100 inhabitants. Despite this finding, de Ridder's (2007) study did not provide complete data from the French provinces (contrary to Paris, which is highly urbanised compared to other French regions). A Eurostat study (2006) used six different elements to test individuals, such as how to copy/paste electronically. Furthermore, there is a lack of research on the effects of IT-related issues in telework programmes in the French context. It remains unclear

whether the expansion of high speed internet access in France represents a benefit for employers to implement or increase telework programme participation.

Due to the relatively low penetration of IT and the internet, France has initiated a number of government-supported programmes within the framework of 'state modernism' (ETO, 1998). Institutions such as the EU (Martinez-Sanchez, Pérez-Pérez, Vela-Jimenez, Carnicer and de Luis, 2003) and the DATAR in France (Duncomb, 1997) have also promoted the diffusion of telework in France since the 1990s (Martinez *et al.*, 2003). Though the numbers of teleworkers in France have increased (INSEE, 2003, 2009), its diffusion has remained below expectations (*Centre d'Analyse Stratégique*, 2009; ETO, 1998; SIBIS, 2003).

### **Telework uptake**

Studies on telework have been inconsistent and have lacked robust data. This could be due to the difficulty locating teleworkers since one inherent aspect of teleworkers is that often they are not visible. It is also unclear if the growth of telework in France has been documented with any precision. It is, however, clear that the French government has endorsed the improvement of internet access, at least at a technological level. Again, it remains unclear if governmental intervention is the primary influence for broadband uptake (de Ridder, 2008).

Within the framework of 'state modernism,' the DATAR (2005) set objectives to improve the availability of high speed internet access for business use through fibre optic networks. This suggests that there may be structural issues associated with telework use which impede its uptake. Moreover, one constraint for telework adoption in France is a lack of computer and internet access, especially in regions outside of urban centres (*Challenges*, 2008).

### **Internet access in France**

Despite government initiatives (ETO, 1998), France has relatively little internet usage compared to other OECD countries. High speed internet access is available to approximately 74% of French households (*Le Figaro*, 2003). In France, 74% of internet access available serves a population concentrated in 21% of the territory. One objective of the French government was to have the territory covered by at least one service provider by 2007. A study by the OECD (2006) revealed that this had not taken place. The OECD claims that France ranks 14<sup>th</sup> in Europe in terms of access to the

internet. Moreover, currently 20% to 30% of French continental territory does not have high speed internet access (*Challenges*, 2008). In this same report, it was found that approximately 45% of all internet subscribers in continental France in 2007 do not receive a line capable of simultaneously receiving internet and telephone services. At the time of this study it is unknown if these figures have increased. This suggests that telework could be difficult to implement in some areas of France due to inadequate internet access.

France's failure to provide nationwide access to computers and the internet has been attributed to the lack of combined effort (OECD, 2001). France's initiatives for access to computer use and the internet stem from national, regional and local authorities. This suggests that the lack of employers providing internet access has impeded the spread of telework. In 2008, French president Nicolas Sarkozy claimed at the Hannover Technology Convention (CEBIT) (*Challenges*, 2008) that an objective of his government is to provide 70% of French households with at least one computer, and that by the end of his five-year term (ending in 2012) 100% of the population will have a high-speed internet connection.

France Telecom's (the national telecommunications provider) reluctance to encourage internet use whilst maintaining the Minitel (French electronic network developed using the French ground-based telephone line network) was one barrier which slowed internet uptake. The lack of French-language internet sites at the outset was another. Government initiatives are needed in order to provide computer and internet access on a nationwide basis. Until the complete break up of telecoms in France takes place, internet access, and the implications it has on telework opportunities, remains problematic.

### **Occupational influences on telework uptake**

By contrast, Haddon and Brynin (2005) suggest that telework is *not* due to a technological shift, but is based rather on occupational practice. Their study, however, does not consider non-teleworker perspectives. Conversely, Baker, Avery and Crawford (2006) suggest that technology hinders telework growth. Though Baker *et al.* (2006) argue that IT support is important for teleworkers, non-teleworkers and line managers, they do not consider issues outside of the Anglo-American context.

Jaakson and Kallaste (2010) claim that structural aspects of telework, such as IT costs, workplace furnishings and health and safety issues are often supported by teleworkers. They also advance that this situation modifies psychological contracts (which can also be described as sets of expectations) between teleworkers and their employers. Their study used multiple cases (eight) in the Estonian context. Though it cannot be claimed that results are transferable to the French context (such as through the lens of culture (cf. Hofstede, 1980, 1991; Spony, 2003)), results provide insight into the importance of infrastructure and technical issues for teleworkers. Moreover, this suggests that when teleworkers do not receive adequate support from employers, teleworkers can be at a disadvantage vis-à-vis their office-based non-teleworking colleagues.

Technical barriers discussed in this section reveal a lack of a remote work culture due to structural issues (e.g., internet access, IT hardware and software). Moreover, data indicate that French employees lack convenient internet and IT access which also inhibit the development of a remote work culture. It is instrumental to investigate how this affects managerial perceptions, which is explored in the following section.

### **2.3.2 Acceptance issues for managers**

#### **Visual factors**

“At our firm, managers are affected by our industrial culture and management based on presence; not being able to see one’s subordinates is a revolution” (quote from Renault France. (*Centre d’Analyse Stratégique*, 2010, p. 42)).

The above statement from Renault France illustrates the sentiment in the French context which suggests that managers rely on face-to-face presence to lead (cf. Spony, 2003). Telework (also implemented at Renault) upsets this. This is endorsed in one study by Richardson (2010) on teleworker managers, and echoed in a study by Crandall and Gao (2005). Though Richardson’s (2010) study is constrained to one sample in the Canadian context from the perspective of line managers exclusively, it reveals through a case study on one organisation that line managers need to balance autonomy and cohesion. This same study also reveals an emphasis on individual actions for line managers, versus structural forces. This indicates that the relationships between managers and teleworkers are different from hierarchical relationships in the traditional, office-based context, which is also echoed by Spony (2003). Moreover, conventional wisdom suggests that managerial culture is influenced by organisational culture, which

Watad and Will (2006) argue affects managers' acceptance of telework programmes. This indicates that line managers who have adopted a remote working culture will also more easily adopt telework.

### **Employment relationships**

Mello (2007) claims that telework affects the nature of the employer/employee relationship. Moreover, Crozier (1963, 1971) and Thuderoz (2010) argue that employees and employers, by nature, have divergent interests. Mello's (2007) study, however, does not take into account dual or triple perspectives, such as in this study on the CGF telework programme. Moreover, his article focuses on the Anglo-American literature with few references to studies outside of this context. In the French context, it is assumed that factors are also affected by culture (identified by Hofstede (1980, 1991)). This argues that the employer/employee relationship is different in the French telework context.

### **Management based on face-to-face contact**

One constraint for telework adoption in France is a tendency to manage based on presence (Spony, 2003). One Dutch studied argues that line managers can perceive a lack of face-to-face contact, which reveals a need for control (Peters, den Dulk and de Ruijter, 2010). Their study was, however, based on hypothetical questions asked exclusively to line managers, and neglected views outside of the organisations studied (six in total) and those of teleworkers. In another vein, the French workplace exemplifies a long-hours culture (Spony, 2003) based on presence rather than output (de Beer, 2002). This suggests that line managers in the French context emphasise face-to-face contact to manage staff.

Moreover, the study on telework carried out for the French government (*Centre d'Analyse Stratégique*, 2009) reveals that the major barrier for telework development in France is management practice. This study argues that French managers feel that their responsibility is taken away when workers are not visible. Nevertheless, this study fails to take into account managers' points of view. It can also be argued that organisational culture also affects telework (Watad and Will, 2003). This suggests that the French working culture, in addition to the organisational culture of the CGF, both affect telework acceptance for line managers in the CGF study. In this vein, there remains a

lack of research which evaluates the impact of telework in a long-hours culture, based on physical presence, using a method based on multiple perspectives.

### **Use of electronic tools**

There is a lack of studies which focus on the development of electronic tools used to increase communication effectiveness for teleworkers, such as instant messaging or other synchronous systems. This is advanced in studies which reveal that traditional HRM practices are increasingly transferred to individuals, specifically in the telework context (Taskin and Devos, 2005). The development of asynchronous and synchronous communication tools provide remedies for the lack of control perceived by managers, which is claimed by Dupuy (2011). Nevertheless, it remains unknown to what extent these tools are adopted by line managers in the French workplace. Moreover, it could be suggested that asynchronous communication tools upset the French cultural desire for face-to-face communication, as argued by Hofstede (1980, 1991) and Spony (2003). This study on the CGF telework programme attempts to shed light on visual control issues in the French context.

### **Cultural perceptions**

The introduction of the 35 hour work week reinforces the notion of remuneration based on workplace presence. This situation also has implications related to management style for the employee category referred to as 'cadre' (Dany, 2003; Spony, 2003; Stroobants, 2010). A 'cadre,' as introduced in chapter one and for the purpose of this study, refers to a managerial level employee in a firm. A 'cadre' is also considered a high-status employee who has responsibility in the firm and works long hours. Line managers in the CGF sample fit into the 'cadre' status. Moreover, it is suggested in one study on the effects of the 35 hour work week by Fagnani and Letablier (2004) that workers, including 'cadres,' seek more flexibility versus shorter hours. Though most 'cadres' must also work within the 35 hour week scheme, the cultural tendency to work long hours persists (Spony, 2003). It is estimated that approximately 13% of the French working population is a 'cadre' (*Le Monde*, 2010). In conjunction with arguments in chapter one, this indicates that the French workplace is stratified and that manager/subordinate relationships are affected by hierarchical distance (Hofstede, 1980, 1991; Stroobants, 2010).

In at least one study (Spony, 2003), it was found that French managers (including 'cadres'), versus British ones, had a high agreement rate to the statement 'good management is about closely supervising the work of the subordinates.' In this same study it was found that French managers are highly analytical versus a highly expressive style of British ones. This lack of expressive style by French managers suggests more dependence on visual or personal communication with staff. Sociologists Pinçon and Pinçon-Charlot (2007) argue that the French workplace is stratified due to its Marxist tradition, as suggested in chapter one. This also advances that managers are distinguished from other workers and that status is used to distinguish categories of workers. They claim that this influences social structure. Nevertheless, their study lacks comparison with non-French perspectives. Moreover, it could be useful to support their discussion with criteria to distinguish cultural behaviour at the workplace, such as those developed by Hofstede (1980, 1991).

### **Communication**

According to Hofstede (1980, 1991), communication barriers between managers and workers in the French context can be brought to light. Power distance, according to Hofstede, is an employee's level of comfort with hierarchy. This could be one hindrance to telework adoption. One example is the high level of power distance (Hofstede, 1980, 1991) accorded to French managers. Again, this is expressed by Pinçon and Pinçon-Charlot (2007) as a manifestation of the Marxist tradition in the French workplace. This indicates that line managers' perceptions of telework alters hierarchical relationships in France (cf. Hofstede, 1980, 1991).

According to Felstead *et al.* (2005), flexibility generated through telework also entails the need to reconstitute visibility (through reports, as one example). This is endorsed by the individual-collective dilemma of line managers, which maintains that they must balance management with teams and individuals in teams (Taskin and Devos, 2005). Taskin and Devos (2005) bring this to light in a study in the telework context. Nevertheless, their study does not take into account multiple perspectives.

### **Jealousy**

Felstead *et al.* (2005) also suggest that workplace jealousy from non-teleworkers is provoked by the telework situation. Conversely, a French study on teleworkers and line managers (Dambrin, 2004) found that telework reduces 'formal' communication and



brings hierarchical levels closer. Dambrin's (2004) study underscores the role of hierarchy in the French workplace. Nevertheless, Dambrin's (2004) study focuses on salespeople, which by nature work at a distance. This is also based on the assumption that the French workplace has high power distance levels, which is identified by Hofstede (1980, 1991), Pinçon and Pinçon-Charlot (2007) and Spony (2003).

### **Bureaucratic control**

From an alternative perspective, a Belgian study on home-based telework (Taskin and Edwards, 2007) suggests that telework reinforces 'bureaucratic' mechanisms such as surveillance, control and accountability. Lautsch *et al.* (2009) claim that voluntary telework can negatively affect group relations for line managers. Their study, however, did not investigate cultural aspects, which are potential factors to consider in this study on the CGF. In addition, Taskin and Edwards's study (2007) argues that telework can lead to new sources of tension with non-teleworking colleagues (cf. Felstead *et al.*, 2004). The Taskin and Edwards study (2007), however, does not take into account perspectives of non-teleworkers and relies exclusively on reports from teleworkers (using semi-structured interviews as a method). Study participants' comments reveal that tension existed before and during the study. This could suggest that telework had less of an impact on tension than reported in findings. It is beneficial to discuss how this affects the perceived productivity of teleworkers, which is focused on in the following section.

### **2.3.3 Productivity**

#### **Effects of part-time telework**

One Danish study (*Danish Technological Institute, 2005*) indicates that telework productivity decreases when teleworkers remain at home more than 13 days per month (which represents telework carried out approximately two days per week at home). This study involved 100 workers in Denmark and compared teleworkers to office-based workers. Despite this, it is difficult to transpose the Danish experience, since there are underlying socio-cultural factors in the French context (as previously argued).

#### **Managerial perceptions**

One Dutch study (Peters *et al.* 2010) reveals that line managers are sceptical of teleworker performance since they are working away from the workplace. This suggests that line manager in the telework context continue to rely on face-to-face

contact to evaluate worker performance. Despite this interesting finding, Peters *et al.*'s (2010) study is based on hypothetical questions (i.e., not based on the actual experiences of study participants). Moreover, line managers who replied negatively in terms of teleworker productivity were also sceptical about telework in general.

### **The French view**

The literature also fails to identify the effects of part-time telework on productivity in French-based organisations. The literature lacks contrasting analysis of teleworkers' perceived productivity vis-à-vis non-teleworker colleagues in similar positions. In order to decrease bias in this study on the CGF's experience, role set analysis is employed (cf. Merton, 1957) to retrieve comparative views.

### **Productivity as a business case**

Productivity is at the heart of the telework debate for employers as a business case. Productivity is also known to be a key determinant in evaluating employees, and consequently a firm's performance. In the telework context, one quantitative study on 156 Spanish firms (Martinez-Sanchez, Pérez-Pérez, Vela-Jimenez and de-Luis-Carnicer, 2008) claims that telework positively influences firms' performance. Nevertheless, this study was constrained to one case in the Spanish context. Moreover, it did not employ qualitative methods, which could reveal deeper understanding of findings. Methods used to evaluate firms' performance are illustrated through employers' use of measurement tools, such as those related to performance management to assess employees. The growth of these tools has often led to the premise that there should be a clearer link between employees and their contribution to the firm.

### **Perception that telework generates higher productivity**

Though the literature emphasises few negative effects of telework productivity, there is abundant evidence of its positive effects (Collins *et al.*, 2004; Felstead *et al.*, 2005; Halford, 2005; Illegems and Verbeke, 2004; Martinez-Sanchez *et al.*, 2008 and Wiesenfeld *et al.*, 1999). Positive effects include increased productivity and an increased well-being of employees. By contrast, Bailey and Kurland (2002) argue that there is little evidence to support that telework improves productivity. Moreover, the study on home-based telework by the *Danish Technological Institute* (2005) suggests that productivity for home-based teleworkers decreases as of 13 hours per month teleworking at home. For the purpose of this study, productivity is defined as a measure

of output from the production process (Gollop, 1979). Several studies on the effects of productivity on telework have been restricted to one or a few firms outside of the French context.

### **Unexpected effects**

There is a stream of arguments in the literature which point out unexpected outcomes due to increased productivity for teleworkers. The literature reveals that increased productivity is 'reassuring' for employers (Halford, 2005). Despite this, there is also evidence of higher levels of stress, guilt and overwork for individuals (Mann and Holdsworth, 2003). These effects are suggested to be related to spatial isolation. This can be paralleled with findings from Wiesenfeld, Raghuram and Garud (1999) in *Managers in a Virtual Context: The Experience of Self-Threat and its Effects on Virtual Work Organisations* which claim that spatial isolation issues were mitigated for teleworkers through the presence of telecommuting managers. Findings also indicate that workers who were supervised by teleworking managers felt that their status and their careers were less negatively affected. This suggests that line managers who telework have more experience and more understanding of advantages/disadvantages that telework can generate.

The literature suggests that telework increases productivity (Collins *et al.*, 2004), yet fails to identify adequate critical insight into unexpected outcomes. For an employer, traditional views of employee productivity focus on elements linked to employee motivation, which is maintained by Grint (2005) and Watson (2008). However, the uniqueness of the CGF study stems from the fact that there is little known theory in the literature which attempts to explain the impact motivation can have on productivity in non-standard, part-time work situations. Nevertheless, the literature supports the argument that telework productivity could be evaluated by comparing teleworkers' perceived productivity to non-teleworker counterparts, such as in the study done on Lloyds of London by Collins (2005). Another study used firm performance to measure the effectiveness of telework adoption (Martinez-Sanchez *et al.*, 2008). This upholds that firms' desires to increase firm performance is one motor for the adoption of telework programmes.

## **Effects on telework adoption**

Felstead *et al.* (2005) in *Changing Places of Work* argue that more productive ways of working are not the main motors for telework adoption. In their research it is suggested that cost savings for employers are the primary influences, such as the attraction of lower office space costs (Felstead *et al.*, 2005). They also claim that telework provides means to eliminate down time and ‘stretch’ working hours for workers. It is interesting to evaluate if the reduction of down time for teleworkers provides higher levels of productivity, or if it has negative effects on employers. Personality criteria, not mentioned in the study, could potentially affect the motivation of workers. Personality criteria include personal circumstances (e.g., family, health-related issues, isolation and personal motivation).

## **Work evaluation**

In the literature there is also a lack of identifiable tools to effectively evaluate telework output. The conventional view argues that work output relies on a sequence of events (Dupuy, 2011) within spatial and temporal boundaries (Parry *et al.*, 2005). Furthermore, as in the work/life spillover model (Guest, 2001), studies on the bundle of factors which contribute to higher productivity (e.g., less stress, more time, fewer interruptions) in telework contexts (e.g., part-time telework) in the literature remain incomplete.

It is important to identify measures of productivity for teleworkers (Collins, 2005). In addition, many elements of knowledge-based work can be difficult to quantify (Shin *et al.*, 2000). Furthermore, it is difficult to gauge telework activity with a traditional model such as the ratio of input to output because teleworkers’ contribution is not as visible. Collins’s (2005) study on home-based telework at Lloyds of London argues that the use of Six Sigma is one possible measure (Six Sigma is a technique for the analysis and improvement of business processes and reducing errors (Collins, 2005)). In addition, effects of higher productivity in the telework context can also be measured (e.g., burnout). It is useful to bring to light how these issues affect the ability to retain workers, which is discussed in the next section.

### **2.3.4 Staff retention**

#### **Why telework is attractive**

The literature lacks evidence on the effects of telework implementation on employee retention. Nevertheless, several studies have shown the link between opportunities to

work flexibly and employee turnover (Arnold *et al.*, 2006; Thomson, 2008). In the case of the NHS, Arnold *et al.* (2006) found that one reason workers left the NHS was for more flexibility. It has been argued that atypical work decreases career and training opportunities. Thomson (2008) found that staff retention is affected by the implementation of flexible working practices (including telework). Despite this, Illegem and Verbeke's (2004) study reveals that telework can be a means to attract and retain valuable employees. Their research focuses on the effect of telework on increasing employees' skill sets and employability, such as their opportunities to find interesting work. They argue that telework could attract staff. This same study also looked at the difference between telework adopters versus non-adopters in order to explain impact on job satisfaction. Golden (2007) claims that teleworkers have higher commitment to organisations and weaker turnover intentions. This suggests that telework is a desirable feature of employment for workers. This is also based on the assumption that non-work life is linked to work life (cf. Pettinger, 2005) and that both factors affect workers' intentions to remain in their jobs.

### **Telework's influence on job selection**

A US study by Lautsch *et al.* (2009) reveals that out of 125 participants, 26% of respondents claimed that telework positively influenced job choices. Despite this interesting finding, this study was limited to an internet-based population. Moreover, it did not consider qualitative perceptions, which could provide deeper understanding of replies. Another study (Golden, Veiga and Dino, 2008) reveals that despite isolation experienced by teleworkers, turnover intentions were reduced. This same study argues that effective communication tools can mitigate feelings of isolation for teleworkers. Golden *et al.* (2008), however, did not investigate individual experiences qualitatively, which could provide deeper understanding. From the above arguments, it could be posited that telework positively affects job satisfaction and consequently the firm's resource base because it is important for employers to retain skilled people. This suggests that telework programmes can retain qualified staff, and potentially translate into fewer employee turnover intentions.

### **Job satisfaction**

This study examines which elements of job satisfaction are positively viewed by workers. It is a unique opportunity to investigate what influences part-time teleworkers to accept and remain in the telework programme. This investigation attempts to provide

empirical evidence of the CGF telework programme's ability to attract and retain staff who would otherwise not be able to work due to long commutes or the need for flexible working hours. Study results could also support the argument that telework is a means to attract employees who could otherwise not accept employment due to a lack of spatial and temporal flexibility. This suggests that telework can increase the pool of qualified candidates for jobs.

### **Organisational stakes**

It is important to look at the organisational constraints which could inhibit a firm's ability to attract and retain the best staff. This is illustrated in firms' desires for organisational effectiveness (Shin *et al.*, 2000). In terms of organisational effectiveness, firms are influenced by external environments (open systems), economic goals (rationale), personnel behaviour (human relations) and the quality of organisational control (internal processes). All three affect retention. The scarcity of studies on telework in France significantly limits the understanding of the organisational implications of telework's effect on the retention of staff. The following section reveals research questions which emerged from previous discussions.

#### **2.3.5 Research questions revealed from this section**

Based on the literature reviewed in this section, the following second and final set of research questions emerged. These questions are used to investigate related issues in the form of a questionnaire to study participants and represent the key gaps revealed in the available literature on telework and telework in France.

**Question 6:** How do technical issues affect telework?

**Question 7:** What effects does telework have on office management for line managers?

**Question 8:** How does telework affect productivity?

**Question 9:** How does telework attract candidates to work in managers' departments?

The next section discusses role set analysis, which was used to investigate telework at the CGF.

## 2.4 Role set analysis

*The following discussion reveals how role set analysis is defined and why it is appropriate for this study*

### **Background and rationale**

Role set theory suggests that attitudes of role set holders are socially constructed (Katz and Kahn, 1978). It is important to understand how these roles are conceptualised (Truss, Gratton, Hope-Hailey, Stiles and Zaleska, 2002) to evaluate them. Role set analysis (Merton, 1957) is based on the premise that social roles form social structure. Merton (1957), in his theory on role sets, posits that social status, which makes up social structure, is not made up of one but rather several roles. This is distinguished from multiple roles because role holders stem from a single source (also referred to by Merton as social status). The measurement of role set expectations in this study evaluates perceptions from an array of angles.

Role set analysis assumes that there are role set holders (teleworkers, their non-teleworking colleagues and line managers, in the case of the CGF) who each have expectations in their roles. Teleworkers were chosen as the focal point since their experiences are tightly linked to the implementation of telework at the CGF. The experiences that were shared by teleworker and their non-teleworking colleagues were evaluated through research questions in corresponding questionnaires. Due to hierarchical perceptions in the French work culture (cf. Hofstede, 1980, 1991; Spony, 2003), only research questions which pertained to line managers' interaction with teleworkers were addressed to them. Referring to the concept of work relationships (cf. Grint, 2005; Thuderoz, 2010), key actors in the work environment who interact with teleworkers include their colleagues and their line managers. In this study, using role sets provides a means to compare the experiences of teleworkers (as the focal point), with their non-teleworking colleagues and their line managers according to their shared expectations. These sets of expectations form role sets.

Role set analysis also assumes that role set holders interact in a significant way with other role set holders (Merton, 1957). Role set holders were initially identified by the CGF in this study (the CGF selected (on a volunteer basis) teleworkers, their non-teleworking colleagues and their line managers as study participants). This also maintains that there are differing role perceptions between role set holders. At least one study evaluated cognitive and relational issues between teleworkers and their non-

teleworking colleagues (Taskin and Bridoux, 2010). Moreover, role set analysis posits that there is a tendency for role set holders to manage role sets in order to regulate conflict, and to maintain what Merton (1957) refers to as 'social regularity.' Crozier (1963, 1971) also upholds that 'actors,' such as role set holders in this case, attempt to manoeuvre to achieve satisfactory work relationships within organisational constraints.

### **Effects of role sets**

Social regularity allows people to continue with the state of affairs without extreme conflict (Merton, 1957). This is also identified in role conflict theory (Grandey and Cropanzano, 1999; Schaefer, Floyd and Haaland, 2003) which indicates that conflict within a role is undesirable. In sum, role set analysis argues that the relationships between role holders are associated by links that can be evaluated. These links represent a periphery of relationships which surround the pivotal role set holder, or teleworker, in this study.

Social regularity in role set analysis (Merton, 1957; Katz and Kahn, 1978) assumes that it is useful to investigate roles surrounding teleworkers from multiple perspectives because expectations of these roles can be measured within context. Role set analysis is relevant to this study since it examines the role of teleworkers with a comparative investigation of the actors surrounding them. One other study focusing on the implementation of performance management by the UK police force took this approach (Butterfield, Edwards and Woodall, 2004).

By investigating and comparing roles from multiple perspectives, indications of role set holder thresholds can be perceived. These thresholds can be described as a point at which a desirable state within a role can become an undesirable one and vice versa. This is observed by Grandey and Cropanzano (1999) and is based on the assumption that social thresholds exist. Merton (1957) also argues that thresholds exist in groups, which he describes in his discussions on social cohesion (*American Philosophical Society*, 2004). This is also claimed by Crozier (1963, 1971), Grint (2005) and Thuderoz (2010) who claim that social structure exists within the work environment. This suggests that some group members do not carry out expectations to the satisfaction of other group members. At this point, groups can fall apart. It is useful to attempt to identify these thresholds through several lenses, which is enacted by role set analysis in this study.



A role set is composed of expectations vis-à-vis actors with whom role set holders interact in a significant way. This study focuses on the expectations of line managers and non-teleworking colleagues with teleworkers (pivotal role holders) whilst they perform their roles. It can be posited that role set holders also experience an exchange of role set responsibilities (such as extra work carried out by an office-based colleague when a teleworker is not present, as one example), and that this can create role tension (as one example).

Roles can also be described as job duties and obligations perceived by role set holders. Obligations of roles are perceived by role set holders and those with whom they interact (Merton, 1957; Schaefer *et al.*, 2003). One example is the perception of how people perceive the role of a manager. In the case study of the CGF, roles can be evaluated in two ways. First, the evaluation of roles bring to light what the pivotal role set holder (teleworkers in the case of the CGF) expects of other role set holders in his/her role set. Second, the evaluation of roles indicates what role set holders expect of the pivotal role set holder (again, teleworkers in the case of the CGF). The evaluation of the experiences of role set holders reveals how roles are perceived and if they are similar or different.

### **Perceptions of roles**

Role definitions may fall outside of the scope of formal job descriptions. Teleworkers in the case of the CGF have job descriptions which reflect increased spatial and temporal flexibility vis-à-vis full-time office-based staff. This is in contrast with traditional perceptions of work, upheld by Parry *et al.* (2005). Certain roles may also provide behavioural traits that are perceived as part of that role. This study also attempts to see how these roles become internalised (Merton, 1957) in the telework context. Internalisation refers to the adoption of behavioural traits perceived as part of a role (such as the perception of being an ‘organised worker’).

In this study it is useful to not only view differences in roles perceived by role set holders, but also to view other effects which emerge, such as role ambiguity, role incompatibility, role conflict, role stress, role overload and role under load.

Role ambiguity indicates that role set holders are unclear about the conception of their roles. This may include how work is evaluated, the scope of responsibility, or the expectations of others (Havergal and Edmonstone, 1999). This ambiguity may also be

expressed through the lenses of other role set holders, such as colleagues and/or line managers in the case of the CGF. One example is when a worker sees himself/herself as productive, despite colleagues' view of the worker as unproductive.

Role incompatibility suggests that expectations of role set holders are incompatible (Havergal and Edmonstone, 1999; Merton, 1957) with ethics and/or personal standards, for example. This could result in role conflict (Schaefer *et al.*, 2003). Role conflict can arise when role holders need to fulfil conflicting obligations. One example is when the role of a parent conflicts with the role of a manager, due to incompatible schedules (Havergal and Edmonstone, 1999). Merton (1957) suggests that role conflict occurs when expectations of role set holders are violated. This can occur when a role set holder must choose between expectations.

One key source of role stress is the difficulty to maintain relationships (Crozier, 1963, 1971; Merton, 1957; Snoek, 1966). In the case of teleworkers at the CGF, role stress (Merton, 1957; Schaefer *et al.*, 2003) can occur when the expectations of non-teleworking colleagues and/or line managers vis-à-vis teleworkers are unfulfilled. Role stress can also be manifested by the role set holder through low morale and illness, as two examples (Havergal and Edmonstone, 1999). Role stress can also stem from relationship difficulties with colleagues. Moreover, role stress which results from role accumulation, according to Merton (1957), is outweighed by advantages obtained by the role set holder.

Role overload refers to having too many roles to manage at the same time (Merton, 1957). This can occur when role holders have too many personal and/or professional obligations to handle simultaneously. One example is increased work obligations (having multiple jobs). Role under load refers to people have routine tasks that are not challenging. An example is having a job which is below one's capabilities (Havergal and Edmondstone, 1999).

In this study, role set analysis allows the investigation of the experiences of role set holders and to explore their perceived expectations of one another. In turn, the investigation of these expectations allows the identification of advantages and disadvantages of telework for teleworkers, non-teleworking colleagues and line managers (i.e., advantages and disadvantages interpreted through the satisfaction of interests per Crozier (1963, 1971)). The use of role set analysis also provides

indications of role set holder satisfaction thresholds. These thresholds represent parameters within which role set holders seek to maintain desirable working conditions, and to mitigate undesirable ones. In addition to the use of role set analysis, it is instrumental to develop an appropriate methodology to explore the case of telework at the CGF, which is discussed in the next chapter.

### **3. Methodology**

#### **3.1 Research questions and development of methodology**

*This section reveals how research questions emerged and how the investigation of the literature informed the development of the methodology for my study*

The conceptual basis of my study reposes on the assumption that work not only affects social life but also people with whom workers are in contact and interact (such as teleworkers with their non-teleworking colleagues and their line managers).

The following set of research questions were brought to light through the development of my literature review. They did not emerge consecutively nor chronologically. As the literature was searched and sources pieced together to form common themes, it became evident to me that telework had implications below the surface of research done during the historical period covering the introduction of IT in the workplace (beginning in the 1970s and 1980s). The literature also revealed many issues which brought together concepts and themes from work- and non-work life.

Through searches in the tertiary literature from the general to the specific, key areas were revealed. This sifting process allowed me to find overlap and ascertain links between concepts and themes from sources. This approach is consistent with the process of a systematic literature review (Tranfield, Denyer and Smart, 2003). This entails the use of clear aims in the literature review process, supported by key word searches. Key words were revealed through a process similar to the spiral approach which is supported by Saunders *et al.* (2009). This suggests that key words for searches were refined through a continuous process. The subsequent development of related research questions was carried out within the scope of this study (within the context of the CGF's experience with telework). I was also dependent on the availability of English- and French-language sources related to topics investigated.

I was aware of cultural assumptions when searching the literature in English and French. This suggests that French-language sources, in addition to English-language ones, would provide deeper insight into cultural perceptions. Moreover, choosing English- and French-language sources required me to interpret sources using two distinct lenses: one from my Anglo-American perspective and the other from my French perspective. This required mental 'juggling'. Consequently, meaning was sometimes blurred. An example is when my embedded cultural perceptions inhibited me from

interpreting a French source from a non-French stance. This is consistent with the ‘insider/outsider’ dilemma (Dwyer and Buckle, 2009) which suggests that there is an area between the roles of a researcher as an ‘insider’ and as an ‘outsider’. My experience as an insider refers to my identity as a French-cultured person. My experience as an outsider refers to my identity as an Anglo-American cultured person. These identities came to light over the period of the study as I was in contact with both cultures simultaneously. As Dwyer and Buckle (2009) argue, it was enriching for me to operate within these two roles, in a space they define as ‘hyphen’, because it allowed increased retrospect and self-reflection on the role of culture in my study.

The following research questions cover the key issues of telework from employee and employer perspectives in the French cultural work context of a part-time telework programme at the CGF. They provide a basis to identify advantages and disadvantages of telework and the exploration of teleworkers’ interaction with their non-teleworking colleagues and their line managers. This is based on rational choice theory, attributed to Weber (Scott, 2000) which claims that people will calculate advantages and disadvantages before taking any action. This is also based on Crozier’s (1963, 1971) and Thuderoz’s (2010) view that employees and employers attempt to seek satisfaction despite divergent interests. The literature from this review shows that it is useful to evaluate these advantages and disadvantages in the telework context.

In summary, the following set of research questions (from the employee and employer perspectives) emerged from the literature reviewed:

**Question 1:** How does telework affect working conditions?

**Question 2:** How does telework affect non-teleworking colleagues?

**Question 3:** How does telework affect careers?

**Question 4:** How does telework affect work/life balance?

**Question 5:** What qualities do employees feel are important to be a successful teleworker?

**Question 6:** How do technical issues affect telework?

**Question 7:** What effects does telework have on office management for line managers?

**Question 8:** How does telework affect productivity?

**Question 9:** How does telework attract candidates to work in managers' departments?

The studies discussed in my literature review used a variety of methods, using different sample sizes. Large samples, such as those investigated by Martinez-Sanchez *et al.* (2008), were collected to measure effects of telework in using statistical tools. Other studies focused on the experience of telework in a Belgian national administration (Taskin and Edwards, 2007) and at a British private multinational (Collins, 2005). Another study by Dambrin (2004) investigated the effect of telework on the relationships between teleworkers and their line managers in a French commercial context. In addition, one study on the experience of non-standard employment practice at the NHS (Edwards and Robinson, 2004) used role set analysis (Merton, 1957) to compare and contrast perceptions of part-time nurses.

My study was developed by combining these research methods and traditions. It uses the CGF as an exploratory case to study teleworkers using role sets to compare and contrast their experiences with their non-teleworking colleagues and their line managers. My study employs questionnaires to investigate telework in a case study on the CGF (the method) using two forms of analysis (open-ended questions to pick up depth and attitude scales to provide complementary indicators). The next section discusses case study analysis and how it was used in my study.

### **3.2 Case study analysis**

*This section reveals how case study analysis supports the investigation of telework at the CGF*

#### **Foundation**

Case study analysis is an in-depth exploration of a phenomenon (Collis and Hussey, 2009). Yin (2009) describes a case study as an attempt to explain a phenomenon within a particular context. Creswell (1998) argues that cases can be developed through the use of multiple sources of information which provide a rich context. Though Creswell (1998) and Yin (2009) provide a rationale for the use of a case study, the literature does not clearly identify which types of case studies exist (Collis and Hussey, 2009). Nevertheless, Collis and Hussey (2009) claim that exploratory case studies, such as this one, are useful where there is a lack of theory and a deficient body of knowledge.

My study on telework at the CGF reposes on an exploratory case study approach since it attempts to investigate a phenomenon within a single context (Yin, 2009). Moreover, an exploratory case study looks for insight and patterns. This approach does not suggest generalisability or typicality of findings. This study on the CGF is a single case with multiple units of analysis, referred to as a case study type three, per Yin (2009). The units of analysis, role set holders in this case (to be defined and discussed in the following section), were evaluated using self-administered questionnaires. This was the most appropriate form of investigation since it allowed me to contact all participants simultaneously. My study uses multiple sources of information from a single organisation, within a single context. This approach is also referred to as typical case sampling (cf. Saunders *et al.* (2009)).

One weakness of case studies is that they are restricted to a singular context which can suggest response bias (Yin, 2009). Despite this, one strength of case studies is the potential rich understanding of the context of research (Saunders *et al.*, 2009). The use of a single case for this study is appropriate in at least two ways. First, this study represents a group of teleworkers in governmental administration in the French cultural context, which has not yet been the focus of a study. Second, the case of the CGF is unique because there has been no such study on teleworkers in the French public administration context. It is thus a phenomenon that has not been considered before (Yin, 2009). Using a single exploratory case allowed increased depth and understanding. Furthermore, using multiple units of analysis allowed the comparison of data from alternating perspectives.

### **Application of the case study approach to the CGF study**

The case study approach has been used in other studies on telework. One study on Estonian teleworkers (Jaakson and Kallaste, 2010) suggests that telework alters the psychological contract between employers and employees. Though this study is limited to the Estonian context, it reveals that the unwritten set of expectations (referred to as a psychological contract) are altered when teleworkers support extra costs, such as for IT and home offices, which are otherwise provided by employers for office-based workers.

Another study on telework evaluated vocabulary used by teleworkers through observation and interviews (Tietze, 2005) but did not compare findings with other key stakeholders, such as line managers. One other study identified critical issues in the literature to develop key success factors for telework (Kowalski and Swanson, 2005).

Nonetheless, it remains unclear if these success factors are identifiable in French-based organisations which use telework. Large-scale studies have also used equation modelling to evaluate HR practices' impact on telework programmes (Martinez-Sanchez *et al.*, 2008). Findings in the previous study are derived from cross-sectional data and can be affected by contextual and/or other influences.

The literature suggests that quantitative techniques used in case studies can be difficult to carry out since they can require complex methods and large sample sizes (Cepeda and Martin, 2005). From a positivistic standpoint, using a quantitative approach for a case study also suggests that there are pre-determined criteria to be evaluated. In this study, data analysis focuses on the interpretation of meaning derived from qualitative data stemming from open-ended replies received from respondents.

According to Yin (2009), case studies such as this one could contribute to theoretical generalisation, and be further applicable to other, similar cases. Moreover, Strauss and Corbin (1998) claim that if concepts are sufficiently developed, they are likely to occur in variant forms of other organisations. Another aim of this exploratory case study is to provide insight on the processes and conditions which constitute teleworker role sets and the issues surrounding them. An exploratory case study is appropriate for the case of the CGF since the focus of data analysis is on the interpretation of participants' experiences through the lenses of their expectations. This can provide deeper insight into the effects of telework in a French public administration context, such as that of the CGF. The next section discusses how data were collected for this study.

### **3.3 Data collection**

*This section discusses how data were collected for this study*

#### **3.3.1 Questionnaire design**

##### **Purpose**

The purpose of questionnaires in my study is to compare data between teleworkers and their non-teleworking colleagues (representing one role set holder dyad) in addition to teleworkers and their line managers (representing a second and final role set holder dyad). A role set holder dyad refers to a pair of role set holders. I collected data from several perspectives in order to explore the effects of part-time telework (carried out by employees who teleworked on a part-time basis as part of their full-time schedules at the



CGF). This can identify differences in views to be compared and contrasted. Moreover, the use of self-administered questionnaires, using a non-probability sample (Saunders *et al.*, 2009), allowed all participants to be contacted simultaneously. The use of non-probability sampling (or non-random sampling) is adapted to the case of the CGF because there is little variation in population (the population of teleworkers in this case). This also argues that the sample of teleworkers at the CGF represents one population of this study (total population of teleworkers and a potential equal number of their non-teleworking colleagues and their line managers).

### **Approach**

The literature indicates that research using questionnaires should not be undertaken without a pre-test (Churchill, 1979 and Churchill and Iacobucci, 2002). The questionnaire developed for the pre-test for the CGF sample was adapted from the one used in the Edwards and Robinson (2004) study (cf. appendices 5, 6, 7, 8, 9 and 10) on the evaluation of the business case for part-time working amongst qualified nurses. The questionnaire was an appropriate model for this study in at least three ways.

First, it provided a good example of a questionnaire used for more than one population (in this case nurses and their line managers). Second, the structure of the questionnaire provided a basis to develop question categories and sequencing. Third, the questionnaire was based on one of the few studies which looked at educated and trained part-time workers. It was thus suitable for use on employees in the CGF study.

### **Content**

Question content was developed so that key concepts and themes, related to research questions, were identifiable. The question phrasing stage concentrated on improving unclear meaning. Questions were reviewed to eliminate repetitive and/or unnecessary information. This was especially important since questionnaire content stemmed from research questions addressed to different participants. This approach was also used by Fuller, Healey, Bradley and Hall (2004) to develop a questionnaire addressed to multiple participants to explore their experiences. In order to provide linguistic clarity and reduce bias, questionnaires were reviewed not only per content but also per language used to address each participant category (i.e., teleworkers, non-teleworking colleagues and line managers).

Positively- and negatively-worded questions were used interchangeably to mitigate respondents' tendency to mechanically answer one end of a scale, as advocated by Sekaran (2000). The length of questions was also kept to less than twenty words whenever possible. This is also advocated by Sekaran, in addition to sequencing from the general to the specific (Sekaran, 2000).

### **Combined use of open-ended questions and scales**

Questionnaires (cf. appendices 5, 6, 7, 8, 9 and 10) were developed using a series of measures based on attitude scales (Sekaran, 2000) and open-ended questions. The questionnaire data retrieved allowed the discussion of sets of themes using evidence from respondents. Open-ended questions allowed me to capture new events and to compare commonalities and differences vis-à-vis scaled replies.

Standardised attitude scales (Sekaran, 2000) allowed systematic comparison between different groups of employees. Attitude scales are useful since they provide numerical values for behaviour. This study used a summated rating scale: a set of attitude items, all of which are considered to be of approximately equal attitude value. The summated rating scale used in questionnaires included five incremental ranges of replies from 'strongly agree' to 'strongly disagree.' Replies were evaluated to give attitude scores. The collective use of open-ended questions and attitude scales provided higher levels of analytical power.

### **Introductory letters**

An introductory letter was sent with each questionnaire (cf. appendices 3 and 4). Accompanying letters were sent to each potential respondent by paper, and email when possible. Information on how to complete the questionnaire and approximately how long it would take to complete it was included. Accompanying letters included information on the purpose of the study and reiterated the guarantee of anonymity and confidentiality. It was also stipulated that any information provided by the participant, including identity, would be shared with no one and that the study would be used for academic purposes only (cf. appendices 3 and 4).

### **Questionnaire flow**

Data from introductory sections of each questionnaire (which contained personal elements) were important to obtain without fear of disclosure. Sekaran (2000) states

this type of information should be gathered with sensitivity to respondents' privacy, since some participants may hesitate to answer questions which could reveal the identity of the participant (such as questions on gender, when there are few male or female respondents, which is pointed out by Sekaran (2000)).

Questionnaire sections divided research questions into question subsets (cf. table 3.1 below).

**Table 3.1: Questionnaires per content and participant.**

*X* = included in questionnaire type, per questionnaire recipient

*TW* = teleworkers

*NTW* = non-teleworkers

*LM* = line managers

<i>Questionnaire content</i>	<i>TW</i>	<i>NTW</i>	<i>LM</i>
Sections one to four	X	X	X
Section five	X	X	—
Section six	X	—	X

Three questionnaire versions were developed. The three categories of participants in the study (i.e., teleworkers, non-teleworking colleagues and line managers) received dedicated questionnaires (cf. appendices 5, 6, 7, 8, 9 and 10), in which research question themes, stemming from research questions addressed to them, were embedded. All questionnaires (for all three participant categories) included five main questionnaire sections:

- section one: employment
- section two: patterns of work
- section three: programme experiences
- section four: participant profile
- section five: research questions, formulated in sets of attitude scales and corresponding open-ended questions, per participant type

Since teleworkers are pivotal actors in role set analysis in this study, their replies could be compared with respective matching role set holders (i.e., with non-teleworking colleagues and line managers). Questionnaires for teleworkers included all questions. As illustrated in table 3.1 above, questionnaires for non-teleworking colleagues (cf. appendices 7 and 8) and line managers (cf. appendices 9 and 10) contained only questions pertinent to them. The questionnaire was designed to allow the comparison of replies from non-teleworking colleagues and from line managers with those from teleworkers.

### **French translations**

Since study participants were French speakers, all documents (introductory letters and dedicated questionnaires) were translated into French from English using the direct translation technique (Saunders *et al.*, 2009). The direct translation technique is the translation of documents from one language to another without back translation (i.e. without translating documents back into the language of the source document to compare for mistranslation). This is an acceptable technique since I am bilingual and bicultural in English and French. Moreover, using this technique avoids difficulties in the translation of idiomatic and lexical meanings. English and French versions of all documents are included in the appendices of this study (cf. appendices 5, 6, 7, 8, 9 and 10). The direct translation technique (Saunders *et al.*, 2009) was also used to translate open-ended question replies for transcription from French to English. Nevertheless, in all translations a bilingual/bicultural colleague assisted in checking all translations for errors.

I have extensive experience writing and translating in English and French. I have over 12 years experience as a bilingual employee in HRM and contract management in Paris, France. Moreover, I have translated several publications (governmental articles and documents) from English to French and from French to English.

### **Questionnaire finalisation for the pre-test**

The questionnaire design process, including revisions and translation into French, took a total of three months to complete, from April to June 2010. Questionnaires for the three study participant groups (i.e., teleworkers, non-teleworking colleagues and line managers) were finalised for the questionnaire pre-test in June 2010. The questionnaire

design process included the distribution of questionnaires, which is discussed in the following section.

### **3.3.2 Questionnaire administration**

#### **3.3.2.1 Questionnaire pre-test**

##### **Approach**

After the finalisation of questionnaires, a pre-questionnaire launch, or pre-test as defined in the literature (Churchill, 1979 and Churchill and Iacobucci, 2002), took place in June 2010. It is important to carry out a questionnaire pilot test to obtain an assessment of its validity and if there are problems answering the questions (Saunders *et al.*, 2009).

For the pre-questionnaire test, five participants for each questionnaire recipient category (teleworkers, non-teleworking colleagues and line managers) were chosen from two groups of English-speaking part-time Master of Business Administration (MBA) and Bachelor of Business Administration (BBA) programme participants in a Swiss university of applied sciences in the canton of Valais.

One MBA/BBA programme instructor was contacted about the study. The instructor agreed to students' participation. Students were asked to volunteer to participate on the condition that they were familiar with telework. Also, all selected students were completing a research methods course, which supported the utility of the exercise for the programme instructor. All students who participated in the study had a minimum of 18 months work experience and were familiar with telework practice. Moreover, many came from English-speaking countries where telework is common. The pre-test participants represented a random sample with males and females in each subgroup (pre-testing questionnaires for teleworkers, non-teleworkers or line managers).

##### **Questionnaire pre-test administration**

All participants were explained the goal of the exercise and ensured that their anonymity would be guaranteed. Participants in the pre-test were asked to fill out questionnaires according to their experience with telework (as teleworkers, non-teleworking colleagues or with line managers of teleworkers). Participants were also asked to review questionnaires for grammatical, syntax and typographical errors. Furthermore, participants in the pre-test were asked to give their opinion on the

questionnaire's feasibility. I was available during the exercise, but did not intervene unless there were questions. Pre-test participants were volunteers. In addition, they were under no pressure during the exercise.

The pre-test took approximately one hour to complete. It took place on the university campus in the early evening. Overall, participants reacted positively. They understood the goal of the study and pre-study. Comments from pre-test participants confirmed that the questionnaires had good 'flow,' there was no apparent value-laden phrasing and the time it took to fill out questionnaires was appropriate. Students who did not fill out questionnaires, or had no comments, stated that they were satisfied with the questionnaire they received and had nothing particular to provide feedback on.

### **Pre-test feedback**

Seven participants in the pre-test suggested that the guarantee of anonymity for study participants should be emphasised for the final launch. Five participants also suggested that some questions may be sensitive to answer (such as questions referring to overtime work). Furthermore, six participants were uncertain what the meaning of telework was, since it was confused with the term 'teleworking.' These comments were brought to my attention. I explained that the expression is interchangeable (telework being on term to represent work being done away from the traditional office using some type of IT). Moreover, many participants were more familiar with the term 'telecommuting,' more commonly used in the US.

After the pre-test, amendments were made to questionnaires in English. They were then applied to the French versions (cf. appendices 6, 8 and 10) of the questionnaire using the direct translation technique (Saunders *et al.*, 2009), as discussed in the previous section. French versions of the questionnaires (cf. appendices 6, 8 and 10) were sent electronically to the telework co-ordinators at the CGF for comments beginning May 2010. The questionnaires were amended and returned to me end May 2010. Few inconsistencies were highlighted by the CGF telework co-ordinators. They included suggestions to modify technical terms and nomenclature to better reflect questionnaire recipients' vocabulary.

### **Questionnaire finalisation**

The three questionnaires in English and French were finalised at the end of June 2010. All questionnaires were proofread in English and French, before and after translation.

The French-language questionnaires (cf. appendices 6, 8 and 10) were printed and stapled with introductory letters (cf. appendix 4) in 90 sets (30 sets for teleworkers, non-teleworking colleagues and line managers, respectively). Pre-questionnaire administration was followed by the questionnaire launch, which is discussed in the next section.

### **3.3.2.2 Questionnaire sample and launch**

#### **Access**

The initial search for a sample began with a discussion with a colleague and government representative in France (active in French governmental lobbies for technology in the workplace and notably telework). This person put me in contact with the telework co-ordinator at the CGF at the end of May 2010. At this time the CGF was planning to proceed with an evaluation of its telework pilot programme. I was recommended to the CGF to do a study on its experience with telework.

I first contacted the lead telework programme co-ordinator at the CGF by email and telephone. The CGF, at the time, had two telework programme co-ordinators (one of which is a lead co-ordinator) and a head of the telework pilot programme (head of HRM). These staff members held full-time positions at the CGF and partly dedicated their working time to the telework programme. The CGF received my full curriculum vitae and an outline of this study (in the format of a study proposal).

The lead telework co-ordinator, after discussions with the organisation, granted me access for the study. Consequently, the CGF planned a meeting with all teleworkers and line managers in the programme to introduce me, this study and to discuss the pilot programme and its continuation (held 1<sup>st</sup> July 2010 in Quimper). The organisation welcomed the proposal of this study since it would be able to shed light on participants' experiences and provide a means for anonymous feedback. The CGF agreed to facilitate contact with potential participants.

#### **Questionnaire distribution**

Questionnaires were distributed in person and via email with the option to return them by email or post. Moreover, the use of self-administered questionnaires, using a census approach (cf. Saunders *et al.*, 2009) (to target the populations of teleworkers and their line managers) and a snowball approach (to target the populations of non-teleworking

colleagues), allowed me to contact all participants simultaneously. The CGF telework telework co-ordinators, in addition to teleworkers and line managers, identified suitable non-teleworking colleagues to be asked if they would like to participate in this study. Participants' experiences could thus be captured at one point in time.

French language questionnaires were sent electronically to both telework programme leads and the head to HRM at the CGF for approval in mid June 2010. In mid July 2010, questionnaires and questionnaire launch strategies were discussed on the telephone with the lead CGF telework programme co-ordinator. A confidentiality statement was included in questionnaires (introduction) (cf. appendices 5, 6, 7, 8, 9 and 10) and in introductory letters (cf. appendix 4). This was a clear explanation to guarantee anonymity and confidentiality for participants (as suggested by Saunders *et al.* 2009). It was also suggested by the head of HRM at the CGF that I should participate in the telework pilot programme meeting on 1<sup>st</sup> July 2010 in Quimper.

At the meeting on 1<sup>st</sup> July 2010, all teleworkers, their line managers, the president of the region and other governmental officials involved in telework and technology in the workplace were present. The CGF sent an email to all participants invited to the meeting on 1<sup>st</sup> July 2010 to explain the agenda, my background and the proposed study. At the meeting, it was suggested that I administer paper questionnaires to participants. It was agreed that the CGF would support questionnaire distribution with a follow-up email (with electronic attachments of introductory letters and questionnaires) to all participants by the end of July 2010 (before many staff left on summer leave in August). In addition, the CGF suggested that I meet with telework pilot programme leads and the head of HRM before the meeting (held in the late afternoon of 1<sup>st</sup> July 2010) to discuss the study, questionnaire distribution and any other logistical issues.

I was provided with an office, telephone, computer and printer by the CGF in Quimper on 1<sup>st</sup> July and 2<sup>nd</sup> July 2010. The CGF agreed to invite participants to take printed versions of questionnaires at the 1<sup>st</sup> July meeting, to be returned to me by post (my address was in the introductory letter and at the end of each questionnaire (cf. appendices 5, 6, 7, 8, 9 and 10)). Teleworkers and their line managers were present at the meeting held in Quimper on 1<sup>st</sup> July 2010.

During the meeting held 1<sup>st</sup> July 2010, the pilot programme was discussed by programme leads, the head of HRM and the president of the region. A round table



debate on telework was held with me to discuss the issues to be investigated in the study. Study objectives and questionnaire distribution were discussed with all participants by the CGF and me. It was made clear that participation was voluntary and anonymous. Furthermore, it was emphasised that no study participants would be identified nor any compromising data revealed to the CGF. Overall, feedback from participants at the meeting was positive.

On 1<sup>st</sup> July 2010, 55 printed versions of questionnaires (in French) (cf. appendices 6, 8 and 10) and introduction letters (in French) (cf. appendices 3 and 4) were distributed in paper form to study participants (19 to teleworkers present at the meeting, 18 to line managers present at the meeting and 18 to non-teleworkers). The 18 questionnaires for non-teleworkers were to be distributed by teleworkers and line managers who accepted to do so (out of a total of 25 teleworkers and 25 line managers who could be contacted by the CGF, including those who attended the meeting). The CGF censused a total of 27 teleworkers and 27 line managers in the pilot programme. However, two teleworkers and two line managers were no longer participating in the pilot programme and therefore were not at the meeting, nor included in the questionnaire launch (bringing the total of teleworkers and line managers participating in the study to 25, respectively).

During the meeting on 1<sup>st</sup> July 2010, 18 teleworkers and 18 line managers were invited to ask a non-teleworking colleague to fill out and return a questionnaire for the study, as indicated above. Electronic versions were also made available for distribution upon request, either by the head of HRM at the organisation, or by me. Participants could thus return questionnaires electronically or by post to me (for complete anonymity). This was acceptable approach for the questionnaire launch since it allowed participants to know the objectives of the study, understand the guarantee of confidentiality and anonymity and be able to ask any questions.

### **Structured interview**

In mid June 2010, in preparation of the meeting to be held on 1<sup>st</sup> July 2010 in Quimper, the CGF had contacted potential study participants by email (25 teleworkers, 15 non-teleworkers (identified by the CGF) and 25 line managers) to invite them to a structured interview (in person in Quimper, or by telephone) with me on 2<sup>nd</sup> July 2010. One teleworker agreed. One teleworker accepted to be interviewed by me, by phone. A structured interview, based on key questions from the questionnaire for teleworkers,

was held by telephone for one hour with me on 2<sup>nd</sup> July 2010. Questions in the structured interview included:

- Why did you choose telework? (corresponds to question 15 in questionnaire to teleworkers, cf. appendix 5)
- Describe your experience with telework. (corresponds to question 16 in questionnaire to teleworkers, cf. appendix 7)
- What are advantages and disadvantages of telework? (corresponds to question 24 in questionnaire to teleworkers, cf. appendix 9)

Permission to audio record the phone interview was not granted by the CGF. In spite of this, qualitative data was retrieved during the telephone interview through copious note-taking. Though a complete account of answers was not achievable, this strategy allowed me to take a verbatim account of key words and phrases. This is described as the diagrammatic style by Saunders *et al.* (2009). During the telephone interview I took notes by hand on paper in a closed office at the headquarters of the CGF in Quimper. The majority of the telephone interview time was used to listen carefully to the respondent, without intervening, which could influence replies (cf. Silverman, 2008). Before and after the telephone interview, I orally confirmed the guarantee of anonymity and confidentiality.

My notes were reviewed after the telephone interview to mitigate any inconsistencies and complete them with comments. Despite this, social similarities and social distance can also influence the interpretation of replies and create bias (Miller and Glassner, 2011). I was aware of this, in addition to distance that may exist with the respondent, because of my role as a participant outside of the organisation (the CGF), which is pointed out by Miller and Glassner (2011). In addition, the ‘distance’, perceived from a phone conversation versus a face-to-face discussion, affected the formality of the interview. I could have probably been able to have a more informal discussion (and use the informal form of French ‘tu’ if confidence and trust developed), if face-to-face contact were possible.

I had to work within constraints and adopt formality because it was culturally appropriate. This illustrates another area of the ‘hyphen’, or ‘space’, between the roles of an ‘insider/outsider.’ I discovered that I could profit from my bilingual/bicultural background to operate in this area, where my Anglo-American cultural identity and my

French cultural identity ‘crossed over’. Nevertheless, and as previously discussed in this study, it was also sometimes difficult for me to view issues from an exclusively Anglo-American perspective without influence from the French perspective or vice versa. Though I was not able to obtain in-depth answers from the structured interview, data retrieved were used to pick up depth on questions and support the data set retrieved in questionnaire replies. Transcripts were included with the questionnaire reply from the same teleworker (the teleworker was identified to me during the interview). These data were included in the qualitative discussion of findings (labelled in quotes with the same participant number).

### **Questionnaire reception**

The CGF allowed participants approximately three weeks (after the 1<sup>st</sup> July meeting) to return questionnaires before a reminder was sent. This was co-ordinated by the CGF with my support. By 18<sup>th</sup> July 2010, 5 questionnaires received from teleworkers, 4 from non-teleworkers and 5 from line managers (cf. tables 3.2, 3.3 and 3.4 in appendix 11).

After a telephone discussion on 19<sup>th</sup> July 2010 with the telework programme lead co-ordinator, on 22<sup>nd</sup> July 2010 an electronic reminder was sent to the 25 teleworkers and 25 line managers invited to the meeting in Quimper on 1<sup>st</sup> July 2010. The lead co-ordinator at the CGF thanked participants on my behalf for their study participation and invited those who had not yet returned questionnaires to do so. Moreover, recipients of this email also received attachments of all three questionnaires, with the option to distribute questionnaires to non-teleworking colleagues (who were not directly contacted by email). Again, participants had the option of returning questionnaires by email or post (to retain complete anonymity) to me. Sending the reminder at this time allowed me to capture replies from people who would be returning from summer break (July and August are traditional holiday periods for French employees).

### **Follow-up on questionnaire launch and reflection**

On 8<sup>th</sup> September 2010 I had a follow-up telephone conversation with the telework co-ordinator at the CGF to discuss questionnaire reply rates. The telework co-ordinator suggested that teleworkers, non-teleworking colleagues and line managers turn in any late questionnaires until the end of September. This was also announced at a telework programme meeting (with teleworkers and line managers), by the lead CGF telework co-ordinator, in Quimper on 20<sup>th</sup> September 2010.

For this study, postal and electronic questionnaires were administered to respondents. Such methods are well documented in the literature (Schlegelmilch and Diamantopoulos, 1991). Sekaran (2000) identifies advantages and disadvantages of this type of questionnaire administration. Advantages include high levels of anonymity for respondents, rapid completion time and the ability to reach a large population (low geographical limitations) (Sekaran, 2000). Disadvantages include the inability to clarify questions, an unpredictable response rate and the possibility that not all respondents are part of the targeted population. This did not affect the validity of the role set approach since all teleworkers had been in the CGF programme since October 2009. The HRM department at the CGF also confirmed that the teleworker population remained stable during the period of this study (25 teleworkers), with the exception of 2 participants (out of the initial 27) who had dropped out.

One weakness of the questionnaire launch was the lack of contact information to reach non-teleworking colleagues (I was nevertheless provided with the names of staff who teleworked at the organisation who could provide leads). Despite this, telework programme co-ordinators helped facilitate access to staff. There was a high degree of trust accorded to me to communicate directly with participants. Moreover, the organisation sent email using the internal email system at the CGF on my behalf to encourage higher reply rates.

My visit to the CGF on 1<sup>st</sup> July 2010 to meet participants and telework programme co-ordinators was also useful to motivate study participation. Since I was an 'outsider' to the organisation, the support of the telework co-ordinator at the CGF increased reply rates. In retrospect, this was probably due to the 'insider' relationship that the telework co-ordinator had with employees at the organisation. Moreover, despite my introduction to study participants (in-person on 1<sup>st</sup> July 2010 and by email communication), it was important for employees to be reminded (even indirectly, by sending an email from the internal CGF system) that the study was approved by the President of the CGF. It took a total of three months, from mid June to mid September 2010, to co-ordinate, distribute and receive questionnaires.

Questionnaires were distributed anonymously and confidentially, and through the telework programme manager at the CGF. This was done based on freely given consent from participants. All participants were informed of the guarantee of anonymity and confidentiality at the outset of the study, in accordance with the University of

Gloucestershire Research Ethics Handbook. In addition, filled-out questionnaires (paper copies and electronic versions stored on a USB stick) were secured in a locked cupboard in a university office in the canton of Valais, Switzerland.

### **Final questionnaire responses and reflection**

By the end of September 2010, response rates increased: 16 replies from teleworkers, 11 replies from non-teleworkers and 10 replies from line managers (cf. tables 3.5, 3.6 and 3.7 in appendix 11). At the end of September 2010, a phone meeting was held with the teleworker co-ordinator at the CGF to discuss strengths, limitations and follow-up.

At this time, several strengths of the questionnaire launch were identified. Reply rates were, in part, the fruit of support from HRM staff, including telework programme co-ordinators, communication (e.g., use of internal mail and email) and facilities (e.g., meeting rooms, offices). Furthermore, regular follow-up phone meetings with telework programme co-ordinators were useful to gain trust and co-operation.

The response rate for teleworkers was high for several reasons. First, the telework group had been briefed about the study in June of 2010 by telework programme co-ordinators at the CGF and expected the launch. In addition, teleworkers and line managers were distributed questionnaires directly, which reinforced participation. Furthermore, teleworkers were motivated to participate since they had an interest in the success of the telework pilot programme. Finally, many participants were familiar with this type of study approach. The response rate for non-teleworking colleagues and line managers was also high due to the co-operation of HRM at the organisation and, more notably, leads provided by teleworkers and line managers (in the case of non-teleworking colleagues).

When I reflect back on my role as a researcher at the CGF, it was particularly daunting to gain trust with study participants at a distance (I was nevertheless able to meet many of them at a reception held after the meeting on 1<sup>st</sup> July 2010 in Quimper). This underscores the importance of face-to-face contact in the French work context and its cultural implications for my study. This also suggests that face-to-face contact affects the growth of trust in the French work culture.

Another difficulty in the questionnaire launch was fear of disclosure. Several CGF staff members communicated concerns about the potential dissemination of data. Study

participants were aware of my role as an American/French person from a Swiss university of applied sciences in Valais. Moreover, all participants were aware my cultural background and my role as someone foreign to the organisation (I was not employed, nor was previously employed, by the CGF). According to Miller and Glassner (2011), this can create distance between respondents and me, because of a 'lack of membership' (Miller and Glassner, 2011, p. 134). This also evokes my identity as an 'insider/outsider' (Dwyer and Buckle, 2009). This suggests that there is a 'space' in which I had to navigate, as a bilingual researcher, between the identities of a person of Anglo-American culture and a person of French culture. I am not certain how the study participants at the CGF perceived this. I am convinced, however, that they found this interesting, since many people spoke to me about it informally at the meeting on 1<sup>st</sup> July 2010 in Quimper.

An illustrative anecdote I recall occurred during presentations on 1<sup>st</sup> July 2010 at the CGF headquarters in Quimper. The president of the CGF mentioned in his speech that the organisation could trust me to do the study because "Robert Lewis not only speaks French, but also understands how the French think" (this was taken from my diary notes compiled in Quimper 1<sup>st</sup> and 2<sup>nd</sup> July 2010). The president of the CGF also spoke of the French as a separate culture from the Bretons, which underscored the identity that Bretons foster. I realised that these 'insider/outsider' roles as a bicultural/bilingual researcher as the CGF was a useful 'bridge' for me to use to work in the French-speaking culture (when carrying out research) and in the English-speaking culture (when preparing the study for the University of Gloucestershire). This meant that I had started to explore this 'hyphen,' or 'dwelling place,' and become more comfortable within it.

The telework programme at the CGF was in a pilot phase, which restricted the number of potential participants in the study. The telework programme was thus carried out for a limited number of employees. Furthermore, the organisation did not communicate the pilot phase nor my study to all CGF staff. There were also concerns related to the participation of peers and line managers. Participants feared that data could be shared and become a detriment to jobs and/or work relationships.

Another difficulty stemmed from the restricted number of study participants. The total population of teleworkers was limited to 25. This was also due to the pilot nature of the telework programme at the CGF. Nevertheless, a census approach (cf. Saunders *et al.*,

2009) justified the investigation of this population within a single case (cf. Yin, 2009). After the collection of questionnaires was finalised, findings were analysed qualitatively and quantitatively, which is revealed in the next section.

### **3.4 Data analysis**

*This section discusses the retrieval and analysis of data and reveals study participant profiles*

#### **3.4.1 Analysis of open-ended question replies**

##### **Collection**

Questionnaires (cf. appendices 5, 6, 7, 8, 9 and 10) included open-ended questions. The qualitative data from questionnaire replies were evaluated using content analysis with the extraction of Meaning Units, or MUs (Giorgi, 1985, 1994). Each participant who returned a questionnaire was attributed an identification number. Printed questionnaires were annotated by hand (with a cover sheet) to easily identify key information including age, education, full-time or part-time status, gender and job category. Excel tables, labelled with question numbers and questionnaire type, were created per participant type (i.e., teleworkers, non-teleworking colleagues and line managers). All raw qualitative data collected (transcriptions in English) are included in appendix 12 of this study.

##### **Transcription**

All transcripts from the original French were translated into English. I used the direct translation technique (Sanders *et al.*, 2009). The direct translation technique is the translation from documents from one language to another without back translation (as previously discussed). This was appropriate given my bilingual/bicultural background. Translations of quotes into English were used exclusively in discussions in this study to avoid revealing the identities of participants (the French language indicates the gender of the speaker because of feminine/masculine grammar usage). Moreover, all English-language transcripts were checked, comparing them with the original French ones, with the help of a bilingual/bicultural colleague to make certain that no meaning was taken out of context during translation (as was done with questionnaire translations). Vocabulary was modified to protect participants' anonymity. Furthermore, reply content which could allow the identification of respondents was omitted.

## **Content analysis**

Content analysis was not used to count the number of times themes emerge, which would suggest a positivistic approach, but rather to explore the link between experiences of participants and meaning. Content analysis is useful since it measures the number of instances similar qualitative replies emerge. Content analysis allows the establishment of categories to reveal themes in text which fall into these categories (Silverman, 2003). Seale (1999) and Silverman (2003) both argue that quoted illustrations of data enhance credibility of interpretations.

Nevertheless, Silverman (2003) claims that using content analysis is restrictive since it confines results examined to a grid. However, it brings to light categories and commonalities which may not fit into pre-established codes. In this study, it was important to capture key phrases and words from raw qualitative data (open-ended question replies in questionnaires) that were recurrent (cf. Seale (1999) and Silverman (2003)). In my study, visually evaluating text was also necessary to pick up emergent or unique themes. This is especially useful when answers to open-ended questions reveal new themes, such as when participants are asked to identify 'advantages' and 'disadvantages.' This reveals that qualitative replies can fall outside of the parameters of a question's focus and/or context.

## **The use of Meaning Units, or MUs**

It is doubtful that generalisations for large populations can be made from relatively small samples (Yin, 2009). However, the aim of this study is to gain insight into the experiences of teleworkers vis-à-vis office-based workers and line managers using role sets, in one exploratory case. Content analysis, with the extraction of MUs (Giorgi, 1985, 1994), allowed this.

Word documents were also useful to facilitate electronic scanning and bundling of text that would provide MUs (Giorgi, 1985, 1994). MUs represent groups of text, not necessarily full sentences or paragraphs, which can render meaning. Meaning is derived from text since they reflect 'lived experiences' from participants. This method maintains that the interpretation of lived experiences can be retrieved through the collection of qualitative data. This is anchored in the tradition developed by Giorgi in phenomenological psychology. This was a useful method to extrapolate qualitative data and match them with discussion themes.



As a result, MUs were identified and extracted. MUs were sorted according to themes in order to probe into issues complimented by attitude scale findings (in the form of frequency tables in chapters four, five, six, seven and eight). The retrieval and discussion of MUs allowed me to pick up depth on participants' experiences. Quantitative data, from attitude scale replies, were used as indicators to complement the interpretation of qualitative findings.

### **Coding**

Miles and Huberman (1994) describe codes in three ways: 1) descriptive, involving little interpretation; 2) interpretive codes, representing motives; and 3) pattern codes, which represent emerging patterns. Codes are derived using coding, such as codes derived from NVivo, through three concurrent activities described by Miles and Huberman. Firstly, data is reduced by selecting, simplifying and abstracting raw data. Secondly, data display is the organised assembly of information. Thirdly, conclusion drawing and verification provides meaning and logic from data (Miles and Huberman, 1994). This approach was useful in this study to sift through and sort data (from raw data sets).

NVivo software, a qualitative data analysis package, formerly known as NUD\*IST, allows the identification of codes through the use of nodes (Saunders *et al.*, 2009). Nodes in NVivo represent a code, theme or idea. The use of nodes in sets of qualitative data is useful because it can reveal relationships in text. Nodes also support the interpretation of data (di Gregorio, 2003). Relationships could be put into broader categories and linked to discussion findings through NVivo. The use of NVivo was, however, limited. Though NVivo provided nodes to assist in data sorting, open-ended questions in questionnaires were, for the most part, pre-sorted according to questionnaire section (cf. questionnaires in appendices 5, 6, 7, 8, 9, and 10).

### **Key word searches**

NVivo was useful to search text for key words (e.g., 'family,' 'advantage,'). This was useful to sort text according to themes for reflection and discussion. NVivo was also useful for stemmed searches. Stemmed searches link stems of words to other permutations, such as 'improve,' which stems from 'improvement' or 'improving.' Proximity searches also supported text scanning. They allow searches between key words, set at the number of words separating them; e.g., 'family' and 'balance' can be

searched up to ten words apart (in text). NVivo was also used for word frequency in text. However, all words had to be defined before searches were made.

### **Tag clouds**

Another useful tool which NVivo produces from word counts are tag clouds. Tag clouds represent the importance of words in text, through visual representation by size (i.e., more frequent words appear larger and in bold text). This tool was useful to obtain an exploratory view of the ensemble of open-ended answers, for example, from teleworkers. Tag clouds were compared between teleworkers, non-teleworkers and line managers to gain a holistic view of each raw qualitative data set.

### **Identification of themes**

Qualitative data retrieved were matched according to themes which emerged from findings. Qualitative data from one interview with one teleworker were also included in the data set. Since the interview with one teleworker was structured on three questions (also included in the questionnaire), qualitative data retrieved from it was transcribed and sorted into Word documents under related topics. It was important to use documents that could be easily read, and when possible, fit onto one A4 page. This was a practical technique to gather qualitative findings and evaluate data visually. Moreover, this provided a holistic view of data and potential interpretations, including links between questions.

Though open-ended questions in questionnaires focused on specific themes (e.g., work/life balance), all qualitative data retrieved (including data from introductory sections of the questionnaires (cf. appendices 5, 6, 7, 8, 9 and 10)) were sorted using key words. This allowed me to identify themes as data were evaluated (as they emerged and without relation to the flow of the questionnaires). This allowed me to pick up replies from participants that were in question replies on other topics. This implies that respondents could provide new themes, themes unrelated to the literature or themes unknown to me. This allowed me to recognise patterns, which is one aspect of an exploratory case study (Trochim, 1989; Yin, 2009). Moreover, despite overlap (some MUs covered more than one theme), this technique allowed me to gain a complete grasp of the raw data collected.

### **3.4.2 Analysis of attitude scale replies**

#### **Collection**

Quantitative data in questionnaires were collected from attitude scales. Attitude scales were used to gather information on respondents' feelings vis-à-vis research question themes. From attitude scales, frequency tables were established from replies. This is supported by Sekaran (2000), who claims that it is prudent to obtain these statistics in order to 'feel' data. In addition, it was useful to produce printed tables of these statistics for each question to compare and contrast them visually. Frequencies, illustrated in frequency tables in this study provided indications to support the interpretation of open-ended question replies.

#### **Alternatives**

Non-parametric tests, such as the chi square test, are not appropriate for series of scales with different sample totals (for example to compare the level of association between teleworker replies (n=16) and non-teleworkers (n=11)). Moreover, Saunders *et al.* (2009) suggest that the t-test is inappropriate for the comparison of small samples, such as those in this study.

#### **Counting data from attitude scale replies**

Quantitative data were counted manually from questionnaires and keyed into Excel tables according to each question. Quantitative data (which are illustrated in frequency tables in appendix 11) only provided indications of perceptions. It was essential to compare and contrast qualitative data from questionnaires with frequency table results to gain depth. Data categorised according to research question themes were then sorted according to role set holder dyads. Profiles of study participants, revealed from questionnaires, are discussed in the following section.

### **3.5 Participant profiles**

*The following section reveals profiles of study participants related to employment and work patterns*

#### **Professional and personal profiles of study participants**

Thirteen teleworkers (one did not reply), six non-teleworking colleagues and nine line managers in the CGF sample claimed to be educated to degree level. Two teleworkers,

five non-teleworking colleagues and one line manager claimed to have at least a secondary school education (cf. table 3.8 in appendix 11).

The sample was made up of long-term employees at the CGF, with an average of over 9.8 years of service for teleworkers (cf. table 3.9 in appendix 11). This suggests that study participants had significant experience in the organisational culture of the CGF.

The average age of participants in this study was over forty. Twelve teleworkers and ten non-teleworking colleagues were women, versus four male teleworkers and one male non-teleworking colleague. The majority of line managers (six) were women, versus men (four) (cf. table 3.10 in appendix 11). This indicates a highly gendered sample. This is not atypical, in the light of the literature.

My findings indicate (cf. table 3.11 in appendix 11) that there were few male teleworkers (four) and fewer male non-teleworkers (one). Moreover, my findings suggest that there is no relationship between grade level and gender in the CGF study.

Teleworkers in the CGF sample had the least experience in their posts, with an average of 6.5 years. Non-teleworkers and line managers had 7.9 and 16.6 years experience respectively (cf. table 3.12 in appendix 11). This indicates that all employees in the sample had significant experience in their jobs before participating in the CGF pilot telework programme. This also reveals that non-teleworkers had been in their job roles longer than teleworkers.

Professional positions at the CGF require managerial responsibility and report writing skills. Support staff also have managerial responsibility, although not at a department-wide level. Most positions occupied by teleworkers require teamwork. The majority of positions held by teleworkers also require significant commuting from home to work and to visit the local population and/or administrative offices in the region. This suggests that long commutes were motors for telework uptake at the CGF.

Eleven teleworkers in the sample were professional level staff, performing jobs in mid-managerial positions. Five were in support staff positions. Six non-teleworkers in the sample were in professional positions, and five were in support staff positions. All line managers, or 10, were in professional positions (cf. table 3.13 in appendix 11). This reflects relatively homogenous employment profiles, with the exception of line managers who, predictably, all held professional positions. For line managers, it could

also be argued that this is consistent with their job status (i.e., their hierarchical position vis-à-vis teleworkers and non-teleworkers).

Teleworkers in the sample had an average of 8.9 months experience teleworking in their posts before the study launch (cf. table 3.14 in appendix 11). This suggests that teleworkers all held the same job positions during the period studied (i.e., period of time covering questionnaire launch and retrieval at the CGF).

Non-teleworking colleagues in the sample claimed to have an average of 10.6 months experience working with teleworkers. This indicates that telework had already taken place informally before the formal scheme began at the CGF (cf. table 3.15 in appendix 11). Nevertheless, results do not reveal to what extent.

Few teleworkers in this study occupied supervisory posts at the CGF. This is congruent with studies which suggest that telework is more apparent in non-managerial positions (Felstead *et al.*, 2005). Despite differences in terms of grade/status, the tables above suggest that the CGF sample is relatively homogenous in terms of length of job experience and length of experience with telework.

### **Perceptions of work patterns**

All participants worked full-time in their posts (cf. table 3.16 in appendix 11). Though full-time working hours varied, two non-teleworking colleagues claimed to work less than 36 hours per week (for purposes of this study all working hours below 36 hours per week are considered part-time).

In qualitative replies, all teleworkers claimed to have regular working hours and to be available for non-teleworkers and line managers at those times. Most teleworkers stated that they had regular working patterns that were respected during days when teleworking from home. Four teleworkers claimed to telework the days they desired. This suggests that teleworkers in the CGF sample had limited temporal flexibility. Nevertheless, they benefited from more temporal flexibility than their full-time office-based colleagues, which supports the view that work is conventionally perceived in terms of socially-constructed temporal rhythms (Perlow, 1999).

Not all workers at the CGF have equivalent working times. Though France has implemented a 35 hour work week for all staff since 2001 at the CGF, those who worked at the organisation preceding this date worked 39 hours per week (full-time

work week at the CGF before 2001 for all support staff). Support staff at the CGF do not have a managerial, or ‘cadre,’ status (which suggests that line managers, or ‘cadres,’ have longer working hours). Below are the average mean numbers of claimed working hours (per week), per participant category:

- teleworkers: 37 hours per week
- non-teleworking colleagues: 35.4 hours per week
- line managers: 44.2 hours per week

Four teleworkers and three non-teleworkers revealed that they could work the hours they chose (cf. table 3.17 in appendix 11). This indicates that a minority of non-teleworkers benefited from temporal flexibility, albeit to a lesser degree than teleworkers. Flexible patterns, versus fixed patterns, refer to the ability to work without a fixed schedule. Nevertheless, non-teleworkers indicated that they had flexibility within regular working times.

Seven line managers claimed to have a fixed pattern of work with their teleworkers (cf. table 3.18 in appendix 11). By contrast, one claimed to have a flexible work pattern. In qualitative replies, four line managers claimed that fixed hours can be adjusted to work needs. This suggests that although telework provides temporal and spatial flexibility, there are negotiated parameters for work schedules (defined by teleworkers and line managers at the CGF).

Most teleworkers and non-teleworkers felt that line managers usually agreed with their requests to alter work patterns. By contrast, few claimed to never be able to (cf. table 3.19 in appendix 11). This indicates that teleworkers and non-teleworkers in the CGF sample have comparable abilities to modify work patterns. Predictably, line managers claimed that they always or usually agreed with requests from teleworkers to alter work patterns (cf. table 3.20 in appendix 11). Line managers gave few qualitative comments in this section of the questionnaire. This can also affect overtime work, which is discussed in the following section.

### **Overtime**

Ten teleworkers claimed to work 10 to 12 extra hours per week (cf. table 3.21 in appendix 11), mostly during the evenings and at weekends. In qualitative comments, teleworkers claimed to work overtime in the evening for urgent tasks. Four non-

teleworking colleagues also claimed to work 10 to 12 extra hours per week (cf. table 3.21 in appendix 11). Qualitative replies from non-teleworkers reveal that they worked overtime on demand from line managers, with a tendency to work more overtime at weekends. One also claimed to work in the mornings in addition to evenings and weekends.

My findings do not clearly indicate how often teleworkers and non-teleworkers at the CGF do overtime work. Nevertheless, my findings clearly suggest that teleworkers and non-teleworking colleagues who participated in the CGF programme worked hours above and beyond traditional working times.

Few teleworkers claimed that they are under pressure to work extra hours in their current posts (cf. table 3.22 in appendix 11). No non-teleworking colleagues claimed to be under pressure to work extra hours. Despite this, previous results suggest that teleworkers experienced increased pressure to work more extra hours versus their office-based colleagues. It is, however, unclear if this is a reason for workers to participate in the telework programme (i.e., to have more flexibility to cope with high workloads).

By contrast, the majority of line managers did not feel that their teleworkers are under pressure to work extra hours (cf. table 3.23 in appendix 11). One manager claimed that increased workloads were the main reason. This suggests that line managers could be unaware of pressure on teleworkers to accomplish greater amounts of work.

### **Commuting aspects**

Teleworkers and non-teleworkers did not have comparable commuting times, either in the morning or in the evening (cf. table 3.24 in appendix 11). Non-teleworkers could be disadvantaged due to this (since they could not decrease their commuting time in contrast to teleworkers). Teleworkers and non-teleworkers in the sample used similar means to commute. The majority used a car to come to their workplaces (cf. table 3.25 in appendix 11). This suggests that the implementation of the CGF telework programme reduced commutes for teleworkers. This also indicates that teleworkers benefited from lower fuel expenses and less car wear and tear.

### **Teleworking hours per week and location of work when teleworking**

Teleworkers claimed to telework 13.2 hours per week from home (cf. table 3.26 in appendix 11). Teleworkers in the CGF telework programme claimed that they could work alternatively at home or at telecentres located throughout the Finistère region. Telecentres are office spaces at the administrative offices of the CGF available for visitors. Staff at the CGF also had the possibility to use these centres before the launch of the telework programme, as the nature of many jobs performed (e.g., social assistants) require staff to regularly visit the population and/or local administrations (e.g., town halls) in the Finistère region. Eight teleworkers claimed to work elsewhere than in their home (in telecentres) for a maximum of 16 hours per week, per person (cf. table 3.27 in appendix 11).

The next section concludes this chapter by discussing role set holder dyads.

### **3.6 Research questions per role set holder dyad**

*This section reveals how research questions are integrated into role set holder dyads and discusses the approach used to draft findings chapters*

The exploration of role set participants' experiences is based on the assumption that expectations between role set holder dyads can be explored. Role set holder dyads in my study refer to role sets composed of teleworkers vis-à-vis non-teleworking colleagues and teleworkers vis-à-vis line managers. Research questions, derived from the literature, provided sets of questions that were embedded in questionnaires.

Since teleworkers make up the pivotal role set holders in this study, all research questions were addressed to them in a questionnaire (cf. appendices 5 and 6). Non-teleworking colleagues and line managers were addressed research questions in questionnaires designated to them (cf. appendices 7, 8, 9 and 10). In conjunction with this approach, research questions with assigned role set holder dyads are presented below.

**Question 1:** How does telework affect working conditions?

*Role set holder dyad:* teleworkers vis-à-vis non-teleworking colleagues

**Question 2:** How does telework affect non-teleworking colleagues?

*Role set holder dyad:* teleworkers vis-à-vis non-teleworking colleagues



**Question 3:** How does telework affect careers?

*Role set holder dyad:* teleworkers vis-à-vis non-teleworking colleagues

**Question 4:** How does telework affect work/life balance?

*Role set holder dyad:* teleworkers vis-à-vis non-teleworking colleagues

**Question 5:** What qualities do employees feel are important to be a successful teleworker?

*Role set holder dyad:* teleworkers vis-à-vis non-teleworking colleagues

**Question 6:** How do technical issues affect telework?

*Role set holder dyad:* teleworkers vis-à-vis non-teleworking colleagues

**Question 7:** What effects does telework have on office management for line managers?

*Role set holder dyad:* teleworkers vis-à-vis line managers

**Question 8:** How does telework affect productivity?

*Role set holder dyad:* teleworkers vis-à-vis line managers

**Question 9:** How does telework attract candidates to work in managers' departments?

*Role set holder dyad:* teleworkers vis-à-vis line managers

The following chapters (four, five and six) discuss findings from qualitative data (i.e., open-ended question replies) and quantitative data (i.e., attitude scale results), per role set holder dyad. Differences in views of role set holders (represented by role set holder dyads above) are explored through their respective role expectations. This was enacted through role set analysis (Merton, 1957).

Though I was aware of my cultural stance as a bilingual/bicultural person, including working within the 'hyphen' of the insider/outsider roles (cf. Dwyer and Buckle, 2009), I endeavoured to obtain meaning from findings within context. This 'hyphen' is a space where I could operate between my French cultural perspective and my Anglo-American cultural perspective. This suggests that I could not, due to my mixed cultural background, interpret findings from a strictly French nor from a strictly Anglo-American perspective. This phenomenon became clearer to me as I tried to understand the study context and study participants' roles within it.

The CGF telework programme provides defined study parameters since all participants are members of the participatory organisation. This is supported by Yin (2009) who argues that case studies such as this one (identified in this chapter as an exploratory case study in a single context with multiple sources of data, referred to as type three), can provide increased depth of understanding (cf. Charmaz and Bryant, 2011). My findings in the following chapters (four, five and six) were drafted within these constraints.

In the following findings chapters (four, five and six), the retrieval of data from questionnaires was structured according to common themes (versus a structure dependent on the flow of the questionnaires). This allowed me to extrapolate and establish broad categories and to interpret the data set.

There were evident common threads from the three questionnaire versions were developed. As previously discussed, participants could also provide answers outside of the scope of the questionnaire (by replying to open-ended questions as one example). The discussions in the following findings chapters (four, five and six) were structured around common themes which emerged from data retrieved. This was done as themes emerged from findings, irrespective of where data were retrieved from in questionnaires (not in numerical order, for example).

These themes, examined in the light of research questions, were then brought together under role set holder dyads identified. This allowed me to compare and contrast findings amongst role set holders (teleworkers vis-à-vis their non-teleworking colleagues and teleworkers vis-à-vis their line managers). The literature review of this study was then further nourished by additional sources to discuss findings.

In the following findings chapters (four, five and six), qualitative replies are illustrated in the form of quotes (cf. MUs (Giorgi, 1985, 1994)) taken from raw data in open-ended question replies from questionnaires. In these quotes, teleworkers, non-teleworking colleagues and line managers are referred to as such, with corresponding participant number (e.g., 'teleworker 1'). Some qualitative data, illustrated in the form of quotes, were used more than once because they fit into more than one context. The use of quotes in this exploratory case study does not attempt to claim typicality (cf. Yin, 2009), but rather to provide insight and the identification of themes. For reference, the complete set of qualitative data retrieved from questionnaires is in appendix 12 of this

study. At the end of each section in the following findings chapters (four, five and six) I reflect and discuss the effects of findings on role set expectations.

## **4. Findings consistent with the literature**

In this chapter I aim to:

- discuss technical difficulties experienced by teleworkers
- explore issues that affect teleworkers' careers
- reveal perceptions of valuable qualities for teleworkers
- show how telework affects perceptions of productivity
- point out how telework affects work organisation
- shed light on telework's attractiveness as a job feature

### **4.1 Technical issues**

There are several examples in France that suggest that although the government has implemented programmes for the spread of high speed internet (*Challenges* 2008), telework growth has not spread as quickly as in other European countries (*Centre d'Analyse Stratégique*, 2009; INSEE, 2009). Though little is known about the technical effects of telework (Ng, 2010), a study by Lim (2004) suggests that technology is one driver for its diffusion.

#### **IT connections and assistance**

Teleworkers in the CGF programme set up individual internet services at home without technical assistance from the organisation. They were able to use a CGF-supplied cell phone and laptop computer, with the assistance of the IT department at the organisation (telephone bills were paid for by the CGF). At least one study (Jaakson and Kallaste, 2010) argues that this is common practice (in a series of eight cases of telework in the Estonian context). I expected there to be difficulties in the CGF telework programme because teleworkers were responsible for technical aspects of work (e.g., internet lines) when working off-site.

My findings reveal the importance of reliable internet and phone connections for teleworkers, which is congruent with the literature (Baker *et al.*, 2006; Barron, 2007). Nevertheless, in France in 2007, 45% of all internet subscribers did not have access to lines capable of receiving internet and telephone simultaneously (*Challenges*, 2008). Teleworkers and their non-teleworking colleagues in the CGF study were asked what technical issues affected telework. Below is a reply from a teleworker.

*Without a reliable internet connection, telework is impossible. Need to be able to be assisted at home by an IT hotline (teleworker 15).*

Other teleworkers claimed that hardware issues were an impediment to complete tasks.

*A slight lack of IT knowledge can lead to a great loss of time (teleworker 4).*

*When printers, scanners are unavailable or when one has to travel to another location urgently, or react to an urgent letter, I am slowed down by telework (teleworker 12).*

Teleworkers appeared to be disadvantaged in terms of remaining up-to-date with computer systems. This is maintained by Aborg *et al.* (2002). Participants' comments emphasised that an unreliable internet connection can hinder completing tasks at a distance. This is congruent with Baker *et al.* (2006) and Jaakson and Kallaste (2010) who claim that telework is dependent on technology.

*Slow network connection, my personal internet connection is used for telework, no IT technician from the CGF has come to my home to check my IT installation (teleworker 12).*

Non-teleworkers claimed that IT connections and internet access are important for teleworkers.

*Slow IT connections (non-teleworking colleague 6).*

*Internet connection problems (non-teleworking colleague 9).*

Predictably, few non-teleworking colleagues revealed issues linked to difficulties experienced by teleworkers. My findings show that non-teleworkers receive adequate internet support on-site through the IT department of the CGF. Teleworkers, by contrast, had to resolve internet and IT network connection problems with their respective service providers directly (when working on systems that were not provided by the CGF). Teleworkers and non-teleworking colleagues, with few exceptions, felt that teleworkers depend on reliable internet connections (cf. table 4.1 in appendix 11).

### **Effects of off-site use of office-based technical systems**

My findings from teleworkers indicate that they experience technical difficulties, such as a lack of access to systems available in the office, including laser printers and certain software programmes.

*Weaker internet connection away from the office. Difficult to load certain documents and connect to the network (teleworker 3).*

This is also revealed in Jaakson and Kallaste's study on teleworkers' technical expectations (2010). Moreover, since all teleworkers had IT installations before this study began, many IT-related issues had most likely been resolved. Teleworkers claimed that there were difficulties to perform IT repairs at a distance.

*Defective IT connections – not being able to be resolved by the IT assistance from my employer (teleworker 14).*

*Since I do not have IT access as an 'administrator,' I have to contact the IT hotline for all technical questions (teleworker 16).*

As another example, the CGF did not provide printers for staff on the telework programme. In this vein, one non-teleworking colleague claimed that teleworkers have less effective office tools.

*Teleworkers at home have less office space and need to have reliable IT tools (non-teleworking colleague 3).*

Non-teleworkers claimed that technical difficulties arose when teleworkers have to solve problems without support from the organisation (at a distance).

*Difficult to reach the teleworker when IT systems are down (non-teleworking colleague 4).*

*IT maintenance, plan to have extra material if there is a breakdown, to save time, they may not have all tools such as a fax (non-teleworking colleague 7).*

My findings advance that the CGF, despite the implementation of the telework pilot programme, has not developed adequate IT support to facilitate remote working. This also indicates that despite the existence of the telework programme, the CGF has not developed a remote working culture.

More teleworkers agreed vis-à-vis non-teleworkers in terms of their ability to resolve IT-related issues in a comparable manner (cf. table 4.2 in appendix 11). This is consistent with the literature which suggests that teleworkers need to be able to work without office support systems (Baker *et al.*, 2004; Barron, 2007; Johnson, 1997).

### **Reflection and effects on role set expectations**

From a socio-cultural perspective, I reflected on the application of French linguistic traditions in a non-face-to-face environment using IT (such as in the case of telework). When I went to school in Paris I was taught social cues, such as making all oral liaisons in French. I also remember the influence of the 'Institut de France' on the French

language. One example I recall is the adoption of pronunciation and spelling of words in the French language. This is voted on by members of the 'Académie Française' (at the 'Institut de France'), also called 'académiciens.' They are considered the guardians of French language and culture. Being able to pronounce the liaisons in French requires the speaker to master the written language to be able to join sounds between words in sentences. The use of the French language is a sign of social stratification (and education of the speaker in the French language). This also influences the use of French in the workplace, such as when using IT systems.

Whilst piecing together findings in this section (by identifying recurring themes), I also reflected on my personal experiences working away from the office. I thought about how dependent I was on reliable IT systems. I often took them for granted until they broke down. I also thought about how an IT breakdown can interrupt work for teleworkers at the CGF, especially when there is no technical assistance for them when they are away from headquarters in Quimper.

Despite the initiative to implement telework at the organisation, IT systems at the CGF have not been adequately adapted. My findings reveal that IT support for teleworkers is carried out on a case-by-case basis. I also feel that my role as an 'outsider' inhibited me from understanding the deeper perceptions of IT support for employees at the CGF. Since I did not have contact with teleworkers to discuss their IT-related difficulties in greater detail (such as through the use of probing questions during interviews), I had to work within the constraints of questionnaires. One example was limited contact if a respondent had questions (respondents could nevertheless contact me by email, for example). Moreover, and from a cultural perspective, it may not have been 'appropriate' for teleworkers to complain about IT systems in place, since the employees in charge of IT systems at the CGF are their hierarchical superiors (I had met the IT director responsible for teleworkers at the meeting 1<sup>st</sup> July 2010 in Quimper). In the French context, this suggests that subordinates may hesitate to voice difficulties to line managers, even anonymously, due to perceived hierarchical distance.

My qualitative findings from teleworkers reveal a lack of technical support. This suggests that telework is one driver which can help develop a remote working culture at the CGF. This culture could be constituted by the implementation of IT support for teleworkers equivalent to non-teleworkers. This could imply that teleworkers could benefit from support equivalent, or superior to, office-based staff. By contrast, my

findings from this section reveal that a key shortcoming for teleworkers stems from the lack of IT updates and access to IT administrators.

Individuals questioned in this study experienced IT-related difficulties and found alternative solutions when no IT support from the CGF was available (such as printing at the office when no off-site printer was available). This reveals that the CGF programme remains in its infancy from a technological perspective. My findings reveal a need for internet and IT-related support to provide tools for teleworkers equivalent to those used by office-based staff (such as software and hardware).

In terms of technical aspects of telework, my findings reveal that teleworkers' experiences are unsatisfactory. This is congruent with a study from Jaakson and Kallaste (2010) who argue that telework negatively alters IT conditions for teleworkers. Furthermore, my findings suggest role conflict for teleworkers because they are required to carry an additional role of IT support provider, often without technical expertise. This situation can also generate role stress, since teleworkers have the additional burden of organising their work according to location (e.g., using certain IT programmes and printers at the office versus at other locations), as illustrated in qualitative replies.

In my research, role stress is experienced by non-teleworkers when they cannot reach teleworkers (when teleworkers are located away from the office). Moreover, the expectations of non-teleworkers can remain unsatisfied when teleworkers cannot provide assistance due to technical problems. Furthermore, role stress for non-teleworkers is generated when they are confronted with additional tasks, despite the lack of support from teleworkers.

## **4.2 Careers**

The literature on telework, notably through the work of Felstead *et al.* (2005), has brought to light the effects of internal networks on careers when workers are not physically present. Felstead *et al.* (ibid) also uphold that careers are built via official channels (e.g., job postings) in addition to unofficial ones (e.g., social networks, office chat). It could therefore be argued that teleworkers could be at a disadvantage since they do not benefit from the same level of face-to-face contact as office-based staff (cf. Bennet *et al.*, 2009).



## **Perceptions of teleworkers' commitment**

My results show that line managers felt that teleworkers are committed to their work. Nevertheless, findings from teleworkers uphold that they may be disadvantaged since they are 'out of sight' (work can be carried out without their consultation at the office) and are seen as 'outsiders' (cf. Sidle, 2008). This is endorsed by Siha and Monroe (2006) who claim that teleworkers are less visible. These arguments are illustrated below.

*If I take part in a meeting I always agree to modify my teleworking days. I am the only one to do my work in the department. In case I am absent, no one takes care of business (teleworker 1).*

*You can be 'cut off' from the team. You may feel that since you telework you need to work more (teleworker 2).*

My findings reveal that teleworkers' feel that it can be difficult to make their presence 'felt.'

Teleworkers and non-teleworkers had convergent opinions in terms of teleworkers' commitment to their jobs (cf. table 4.3 in appendix 11). Line managers felt that teleworkers at the CGF were just as committed as their non-teleworking colleagues (cf. table 4.4 in appendix 11).

## **Teleworker integration**

My findings indicate that teleworkers are perceived as non-standard workers. Moreover, as non-standard workers, teleworkers in the sample show that they consider it important to make their status as teleworkers 'accepted by colleagues. This is congruent with findings from Felstead *et al.* (2005).

*Difficulty to accept telework by colleagues, fear, jealousy for this alternative way of organising work – it is an innovative and recent method of work. Because of physical absence, it can be a way of being excluded – less presence in teams (teleworker 15).*

Comments from non-teleworking colleagues reveal that the quality of work done by teleworkers is satisfactory. Non-teleworkers also felt that teleworkers are able to concentrate better and work more efficiently.

*The teleworker is not interrupted as often as colleagues in the office and by clients, higher availability to follow up on work (non-teleworking colleague 4).*

By contrast, non-teleworking colleagues claimed that last minute requests generated difficulties.

*Less able to give information to line managers and colleagues, bringing 'surprises' and misunderstandings (non-teleworking colleague 7).*

*Difficulty for colleagues to know when the teleworker is available – phone calls are taken by office-based colleagues, documents for work in progress not being available for teleworkers (non-teleworking colleague 10).*

Teleworkers can also benefit from a 'privileged' status (Felstead *et al.*, 2004), which can generate a closer professional relationship for teleworkers, which is brought to light by Dambrin (2004). This is reflected below.

*Deeper professional relationship with teleworker, organisation of work reflected upon and defined together (line manager 7).*

Interestingly, my findings reveal that teleworkers, and to a lesser extent non-teleworkers, disagreed that teleworkers are consulted less on important matters (cf. table 4.5 in appendix 11). In another vein, teleworkers, in contrast to non-teleworkers, did not feel that they received less challenging work (cf. table 4.6 in appendix 11).

### **Effects of telework on career development and training**

Teleworker replies suggest that telework could be disadvantageous to careers, since it affects relationships with line managers in terms of 'being seen.' This is congruent with findings from Golden (2007). My findings reveal that it is important for teleworkers to be involved in office life to network.

*Difficult to explain to people that although one is at home, one is working. A lot of big decisions take place at the 'café' (in social circumstances) – during work/social time at the office. There is a lack of informal contact for teleworkers (teleworker 2).*

Non-teleworkers reveal repercussions for teleworkers due to their separation from office life. Non-teleworking colleagues expressed opinions similar to those of teleworkers, as illustrated below.

*Less direct contact with colleagues, more blurred boundary between work and other things (non-teleworking colleague 9).*

Nevertheless, the majority of teleworkers and non-teleworkers felt that teleworkers receive equal career and training opportunities (cf. tables 4.7 and 4.8 in appendix 11).

## **Reflection and effects on role set expectations**

In my own experience working in the French context, I realise the emphasis on face-to-face contact. In many instances (when I speak French) I notice how I use expressions such as 'bien vu' (well observed) to express the English equivalent of 'well done'. This element of face-to-face contact is also linked to the amount of time spent within socio-professional categories. An example is when people are identified as part of a hierarchical level because they are observed face-to-face with other members of that level. The telework environment upsets this and reveals to me how important being seen with one's 'entourage' in the French work context is.

When I have to interact with people in higher hierarchical positions in the French culture, it is appropriate to make an effort to meet them personally. Perhaps this is a sign that a subordinate needs to make more of an effort than a superior or simply is a sign of respect. In terms of careers, this can put teleworkers at the CGF at a disadvantage, since they do not have the same opportunities for face-to-face contact due to their increased time away from headquarters in Quimper (and thus decreased opportunities to be 'seen').

As I explored interconnections in the data, it became apparent that face-to-face contact plays an important role in how one is perceived as a worker (such as being perceived as a 'good' worker). When applied to the case of teleworkers, teleworkers lack this face-to-face visibility with their line managers and colleagues when they are away from the office. This means that despite advantages experienced by teleworkers, the lack of face-to-face contact, due to culture, may generate longer-term negative effects (such as being overlooked for job opportunities when employees are not physically present with line managers on a regular basis).

My findings from this section reveal that despite better working conditions, telework can negatively affect networking. Though teleworkers are perceived as workers with a 'higher status,' they could be overlooked for opportunities to learn new systems and contact peers for career advancement because they are not as present as full-time office-based staff. Results emphasise the importance for teleworkers to remain in networks and to be aware of 'unofficial' information, which is identified by Bennet *et al.* (2009), despite their geographical separation from the office. This also has consequences in terms of what type of work teleworkers receive. My findings reveal that teleworkers can receive work according to their availability, such as tasks which require attention

outside of working hours. However, there are no indications in terms of what type of work is done at these times (e.g., work necessary for career advancement such as learning new IT systems).

My findings do not indicate if line managers play an active role in career development for teleworkers. Since some line managers did not feel involved in choosing teleworkers, they may not give the same career support to teleworkers as non-teleworkers. This is also revealed in comments from non-teleworkers which indicate that teleworkers do not receive up-to-date tools with which to work (and thus to improve skills).

From the perspective of teleworkers, my findings reveal that they experience role conflict in terms of their difficulty to be an effective worker at a distance and to maintain adequate office contact. My findings point out that teleworkers can feel 'out of sight' (as argued by Felstead *et al.* (2005)). Moreover, my findings point out that this can be in conflict with non-teleworkers' role expectations.

Non-teleworking colleagues experience role overload because they carry extra sets of tasks, which include work that is done in the place of a teleworker (e.g., when a teleworker is not available). My findings suggest that in the case of the CGF, non-teleworkers' roles are altered because they carry out tasks beyond their habitual job expectations. This also has effects on job design for teleworkers, which does not take into account these altered responsibilities for office-based staff.

My findings indicate that line managers' role expectations are not significantly altered by the telework environment. However, one reply from a line manager points out that expectations of teleworkers are altered in terms of closer professional relationships. This is echoed in a study in the French context by Dambrin (2004).

### **4.3 Perceived teleworker qualities**

The literature reveals that personal qualities attributed to successful workers in the traditional office context are also important for teleworkers. Nevertheless, since teleworkers have decreased face-to-face contact, and increased asynchronous communication patterns versus office-based workers (due to non-traditional working times), the qualities required of them, in theory, are altered.

## **Desirable qualities for teleworkers**

For teleworkers to be successful, my findings reveal that they require a battery of personal qualities. This argues that teleworkers also need to have qualities not required of successful office-based workers.

*You have to be methodical: a workday spent teleworking needs to be prepared. You have to know how to like working alone and not be afraid of responsibilities to take care of urgent tasks (teleworker 11).*

My findings also reveal that telework alters relationships between teleworkers and their office-based colleagues because it requires personal qualities that are different from office-based staff.

*Not being afraid to work alone. Knowing how to separate tasks that can be done alone and those that need to be done with the help of colleagues (teleworker 13).*

*Difficult to accept telework by colleagues, fear, jealousy for this alternative method of work (teleworker 14).*

A non-teleworker revealed that it is important for teleworkers to maintain good relationships with colleagues and managers. Moreover, the same respondent emphasised that it is important to be an effective worker in a team in order to be an effective teleworker. This points out that teleworkers in the CGF sample were chosen because they performed well independently as well as with colleagues.

*Communication is important – strong communication between teleworker and non-teleworking colleague, a presentation by the line manager was given to teleworkers and non-teleworkers to understand the telework situation, better cooperate and be able to continue to work in a team. To spread out tasks fairly, to avoid isolation and to plan meetings (non-teleworking colleague 7).*

My findings indicate that teleworkers and non-teleworking colleagues felt that the following characteristics are important qualities for teleworkers: the ability to work alone, being organised, the ability to solve problems independently, technological literacy, having a trusting relationship with line managers, high motivation, having trusting relationships with peers, the ability to manage distractions and tenacity (cf. tables 4.9, 4.10, 4.11, 4.12, 4.13 and 4.14 in appendix 11).

Teleworkers and non-teleworking colleagues also felt that having a trusting relationship with peers is an important quality for teleworkers (cf. table 4.15 in appendix 11). Fewer teleworkers and non-teleworking colleagues agreed that the ability to manage

distractions and tenacity are important qualities (cf. tables 4.16 and 4.17 in appendix 11). Furthermore, teleworkers and non-teleworking colleagues agreed that the following qualities are important: the ability to manage tendencies to overwork and good communication skills (tables 4.18 and 4.19 in appendix 11).

My findings indicate that teleworkers and non-teleworkers had convergent opinions on perceived desirable teleworker qualities, with few exceptions.

### **Reflection and effects on role set expectations**

Pinçon and Pinçon-Charlot (2007) and Méda (2010) argue that national culture influences work-related behaviour. In a French cultural context, this also suggests that perceived job-related qualities are culturally-influenced. One example is the importance of hierarchical distance (Stroobants, 2010). It is valuable to evaluate how telework at the CGF, which decreases face-to-face contact in the French workplace, affects perceptions of desirable work-related qualities for teleworkers. I expected there to be few differences in the perceptions of desirable qualities of teleworkers (when comparing perceptions of teleworkers with those of their non-teleworking colleagues). However, my findings reveal that teleworkers require additional qualities (not required of their non-teleworking colleagues). One dimension I reflected upon is the importance of the presence of a colleague when there is a technical problem for teleworkers. Teleworkers could save precious time when they receive quick help to solve a problem.

In terms of culture, I realise that teleworkers at the CGF were attempting to be perceived as 'equals' vis-à-vis their non-teleworking colleagues. When I explored these issues more deeply, it became clear that since telework upsets face-to-face relationships in the workplace, it is normal for teleworkers to try to make their lack of presence 'felt'. It also became clear that when teleworkers were not present, the situation sparked curiosity, or even tension, from non-teleworking colleagues, since they could no longer apprehend hierarchical levels based on face-to-face observation. This comes back to my point about how in the French context professional stratification is linked to time spent with members of the same hierarchical level (and thus being observed by others as part of that group). This is deeply rooted in the French culture.

I was intrigued to see how these norms and traditions are transposed using non-face-to-face communication tools. I expect that there is a need to adjust written French in terms of style and grammar/spelling. Writing in formal French is a rigorous process. It

requires attention to feminine/masculine verb/adjective agreements ('accords' in French) and the use of protocol according to the level of the recipient. This is inconsistent with the norm of communicating quickly and efficiently using tools such as email or text messaging (which are useful in the telework environment).

There is a need to spend time together face-to-face to be able to 'switch' from formal French to informal French. In social and professional circumstances, there is a ceremonial agreement (often with a handshake or kisses on the cheeks) when there is an official 'switch', agreed upon by both parties, to begin to speak informal French (e.g., using the 'tu' form instead of 'vous'). Culturally, speaking informal French also means that there is less social distance and emphasises an irrevocable, closer relationship. I do not know if this 'switch' could be transferrable to a non face-to-face context, such as in the case of telework. It is beneficial to explore how telework alters these perceptions in a non-face-to-face work environment.

The identities of teleworkers are difficult to ascertain at the CGF because they are a new type of employee. My perceptions as a researcher were nevertheless influenced by my 'blindness' as an 'outsider' to the CGF. I was constrained by this role as someone from outside of the organisation. I could not fully understand what influenced non-teleworker perceptions of teleworkers' desirable sets of qualities because of my lack of involvement with teleworkers and their non-teleworking colleagues. This reveals that results of the study, such as those which indicated tension between teleworkers and their non-teleworking colleagues, could have affected how participants replied to my questions in questionnaires (and in one interview). I was nevertheless able to operate within these constraints. Despite my 'distance' as an 'outsider' vis-à-vis the CGF, my findings allowed me to identify themes in terms of desirable teleworker qualities.

The findings from this section are consistent with the literature, with few caveats. My research reveals that sets of attributes linked to the perception of a 'successful' teleworker are different according to viewpoint (i.e., viewpoints from teleworkers or their non-teleworking colleagues). This is congruent with the literature, which fails to reveal sets of 'key' qualities.

Stroobants (2010) claims that hierarchy in the traditional work environment emphasises distance between managerial and non-managerial workers. Nevertheless, telework can also generate closer hierarchical relationships between teleworkers and line managers

(cf. Dambrin, 2004). This upsets a stratified organisational culture, such as that at the CGF. Hofstede (1980, 1991) and Spony (2003) argue that the French working culture has more formal subordinate/line manager relationships than in the Anglo-American context. This reveals that the investigation of subordinate/line manager relationships in the French telework context is affected by culture, such as when viewed through the lens of power distance levels (cf. Hofstede, 1980, 1991).

My findings indicate that managing relationships with non-teleworking colleagues and line managers underpin the ability of teleworkers to be viewed as ‘successful’ workers. Qualities required of a successful teleworker are therefore not independent: they are the product of working relationships with their colleagues and their line managers. This is identified in replies which emphasise the necessity for teleworkers to be available for their colleagues, as one example. This could also be affected by the French cultural tendency to rely on presence, or a proxy for presence (such as regular follow-up). This is also maintained by Spony (2003).

Aborg *et al.* (2004) report that part-time telework performed by full-time workers (as in the case of the CGF) mitigates negative aspects of the telework situation since teleworkers also have regular contact with the office environment. My findings suggest that teleworkers benefit from better working conditions. They benefit from the positive aspects of working at a distance in addition to those at the office. By contrast, my findings reveal latent tension between teleworkers and their non-teleworking colleagues generated from the part-time telework situation, which is also argued by Felstead *et al.* (2005) and Madsen (2007).

My findings reveal that teleworkers’ role expectations are altered in the telework environment. They experience role stress in terms of their expectations to be a successful teleworker and to be perceived as an effective colleague for their office-based counterparts. Moreover, teleworkers’ replies suggest that they experience role overload since they are expected to perform more roles than their office-based colleagues. This indicates that the role expectations perceived by teleworkers at the CGF can be in conflict with those of office-based workers since a teleworker is expected to be available at the same times as an office-based worker, as one example.



#### **4.4 Productivity**

The literature reveals an abundance of findings which suggests that telework increases productivity (Felstead *et al.*, 2005; Halford, 2005; Illegems and Verbeke, 2004; Martinez-Sanchez *et al.*, 2008; Wiesenfeld *et al.*, 1999). By contrast, Bailey and Kurland (2002) argue that there is little evidence to claim that telework generates higher productivity. Moreover, Felstead *et al.* (2005) indicate that higher productivity is not the main motor for telework uptake. Theoretical arguments from Taskin and Bridoux (2010) argue that telework can endanger knowledge transfer amongst workers (and therefore decrease productivity). It is therefore beneficial to evaluate perceptions of productivity in the French context at the CGF.

#### **Perceptions of increased productivity**

Predictably, my findings advance that since teleworkers are more satisfied, they produce more. However, my findings could be affected by an observational, or ‘Mayo’ effect (Mayo, 1933) since teleworkers are motivated to remain in the programme.

Teleworkers claimed that their productivity increased since they benefited from better working conditions.

*Increased individual productivity (teleworker 6).*

*Higher productivity because of better concentration. Fewer interruptions, higher work quality (teleworker 15).*

My findings also reveal that higher productivity is linked to increased work/life balance perceptions of teleworkers.

*For me telework is a way of organising work which favours the balance between professional and personal lives. However, the main danger is when this significant flexibility to work could break this balance (teleworker 2).*

Nevertheless, this same teleworker claimed there is an inclination to do more work.

*Not easy to stick to hours – work more than initially planned (teleworker 2).*

Arguments maintain that the expectations of teleworkers in terms of productivity are positively affected because they perceive higher levels of output. This is affected by the perception of improved working conditions, such as working in a quiet environment and fewer interruptions.

### **Effects of ‘stretched’ schedules on perceived productivity**

My findings indicate that teleworkers who produce more are disadvantaged because of ‘stretched’ hours, which is also argued by Felstead *et al.* (2005). Furthermore, this could lead to the burn out of highly productive workers, since they do not benefit from a clear separation from work life and home life, which is identified by Mann and Holdsworth (2003). Teleworkers claimed that since telework allows for better work organisation and concentration, productivity is positively affected.

*Teleworkers do not work more, but rather better. They are efficient since they are less interrupted and more concentrated (teleworker 3).*

*I am more concentrated when I am alone. I can advance more quickly and without stress (teleworker 12).*

Teleworker replies support the argument that teleworkers produce more because their working conditions are improved.

*If the work is not done, it is noticeable if one is at the office or not. I am more calm to write letters, memos and minutes, important things that should be done calmly – I do them when I telework. Other things I do at the office in Quimper (teleworker 1).*

*It depends on the individual, but generally, a motivated teleworker can reply just as quickly as a non-teleworker to carry out tasks asked by their line manager, who is located away from him/her (from my personal experience) (teleworker 2).*

Predictably, since teleworkers benefit from increased spatial and temporal flexibility, they experience fewer constraints compared to office-based staff. Transportation difficulties are important to consider because all teleworkers and non-teleworkers participating in the CGF programme have commutes of over 45 minutes per day. In this vein, findings reveal that the expectations of teleworkers in terms of productivity are positively altered because they experience fewer negative effects (e.g., fatigue) from transportation.

Teleworkers and line managers agreed that telework means higher levels of productivity. By contrast, one teleworker and two line managers disagreed (cf. table 4.20 in appendix 11).

### **Line managers’ perceptions of telework’s effect on productivity**

Interestingly, line managers felt that telework positively affects productivity since the roles of workers are well-defined.

*Because of less stress and less fatigue, since staff are in their private space, productivity is higher, in addition they can plan work themselves (line manager 6).*

*Work has to be more organised which implies higher productivity. The teleworker is not interrupted as often as other team members when they are teleworking, this is an advantage for them in terms of well-being and the ability to better manage their work (line manager 7).*

Again, line managers agreed that telework positively affects work quality. By contrast, other line managers claimed that telework does not affect productivity.

*I do not think that there is an effect on productivity (line manager 8).*

*There is no change for me – productivity is the same (line manager 9).*

Nevertheless, the reply below claims that performance may not be enhanced by telework.

*When we improve the well-being of the employee we could imagine that we develop their enthusiasm and their desire to take on projects, make suggestions, etc. (line manager 10).*

In addition, one line manager claimed that productivity is evaluated through regular follow-up.

*From agreed objectives, and weekly follow up on objectives (line manager 6).*

My findings advance that the expectations of line managers in terms of productivity (of teleworkers) are not affected by the telework context. This is due to the lack of evidence in terms of output (output of teleworkers versus non-teleworkers) and the perception that teleworkers perform well since they are volunteers in the telework programme (and desire to make the telework programme a success). Line managers felt that teleworkers are just as productive as office-based workers, with one exception (one line manager strongly disagreed) (cf. table 4.21 in appendix 11).

### **Reflection and effects on role set expectations**

Since the French culture relies on face-to-face contact, I was intrigued to see that teleworkers emphasised higher productivity despite their physical distance from the workplace. I could interpret this in two ways. First, through the lens of power distance, teleworkers sought to please hierarchical superiors (their line managers and the president of the CGF). Second, teleworkers felt lost in this new environment where their French line managers no longer observed them working. They this chose to

‘outperform’ in order to prove that they were not different from other members of work teams. I also felt that teleworkers experienced peer pressure because they wanted to be accepted by their colleagues (and line managers).

Perceptions of productivity are difficult to evaluate because there was no system to track changes between teleworkers and their non-teleworking colleagues (such as a comparison of the number of projects completed). In addition, my role as an ‘outsider’ to the organisation may have influenced teleworkers’ replies in questionnaires. One example is the emphasis on the positive aspects of productivity in teleworker replies. This also reveals that my intervention in the telework programme as an ‘outsider’ (researcher) had an observational effect (teleworkers produced more because they were taking part in the study). Culturally, this can also be linked to perceptions of power distance vis-à-vis the president of the CGF, since he was the initiator of the telework programme (and held the highest hierarchical position at the CGF). In this vein, teleworkers in the CGF programme would be hesitant to reveal negative aspects of the telework programme.

It is unclear from my findings if telework increases productivity in the CGF sample. My findings reveal, however, that perceived productivity is positively affected due to better working conditions. Moreover, my findings also suggest that telework can increase bureaucratic methods and control, which is claimed by Taskin and Edwards (2007). Furthermore, my findings indicate that teleworkers can be disadvantaged in terms of organisational performance, such as decreased knowledge transfer with office-based colleagues, which is maintained by Taskin and Bridoux (2010).

Teleworkers experience role stress because they feel they need to be just as productive (or more) as their office-based colleagues, as illustrated in their replies. This indicates that teleworkers’ role perceptions are altered in the telework context because they feel that they need to be seen as effective workers. This also reveals that teleworkers experience role stress because they rely on the same assessment tools used for office-based workers.

Line managers perceive role stress because of increased follow-up with staff, such as follow-up meetings with teleworkers and reports. This is reflected in comments from them. Moreover, line managers’ expectations of teleworkers are altered because they expect teleworkers to be just as productive as office-based workers, despite difficulties

such as access to documents and colleagues when working away from the office. Role conflict for line managers is generated since they compare the productivity of teleworkers with that of non-teleworkers.

My findings reveal that teleworkers perceive higher levels of productivity, and that they benefit from a more 'privileged' status versus non-teleworkers, which is congruent with findings from Felstead *et al.* (2004). Nevertheless, since teleworkers have better working conditions (e.g., freedom to organise tasks and fewer interruptions), they experience increased peer pressure from office-based workers to be productive. This could fuel jealousy between teleworkers and non-teleworkers, as illustrated in several replies, and increase burdens for line managers. This argues that role conflict experienced by line managers in the telework context upsets productivity assessment mechanisms in place, which by nature are adapted to office-based staff (such as the cultural reliance on face-to-face observation of workers).

#### **4.5 Work organisation**

Work organisation in the traditional work context relies on managers to organise tasks (cf. Grint, 2005). I found it interesting to explore how this is affected by the implementation of telework. Work organisation is affected by the interaction between teleworkers and line managers, which is echoed in studies by Crozier (1963, 1971). This is also supported by Dupuy (2011) who claims that the introduction of IT in the workplace alters work patterns for line managers in the telework programme.

#### **Effects of improved working conditions**

My findings show that teleworkers benefit from improved working conditions, which suggests easier work organisation.

*Better availability and work organisation (teleworker 3).*

*Makes managers reflect on work organisation (teleworker 15).*

This could also suggest that since teleworkers are away from the office part-time they could hesitate to claim to be ill, since they work at a distance. The CGF telework programme agreement at the CGF stipulates that sick leave conditions for teleworkers are identical to those for office-based staff. Nevertheless, four teleworkers and two line managers felt that teleworkers take less sick leave (cf. table 4.22 in appendix 11).

## **Cost savings and office space management**

Line managers felt that teleworkers use equivalent office space (since teleworkers are also based in the office part-time). Nevertheless, line managers also claimed that telework allows them to better manage office space.

*Gain in office space when offices are shared, parking. Better planning of tasks and more in-depth work follow-up (teleworker 2).*

*Lower management costs, less space used in the office, makes managers reflect on work organisation, could be a solution where there is an office conflict (teleworker 15).*

My results present a case for arguing that the expectations of teleworkers for better office space management are positively altered. Line managers agreed with this. Seven teleworkers claimed that telework is cost-saving for directorate budgets. No line managers agreed (cf. table 4.23 in appendix 11).

This also reveals that it is in the interest of teleworkers to underscore positive features of the telework situation. Teleworkers also indicated that they used less office space. By contrast, line managers disagreed with this (cf. table 4.24 in appendix 11).

Nevertheless, four line managers claimed that office space management could be easier. Three teleworkers agreed that teleworkers used less office space. Four teleworkers and three line managers disagreed that telework allows line managers to effectively manage office space (cf. table 4.25 in appendix 11).

## **Work organisation difficulties for line managers**

My findings reveal that few line managers experienced difficulty organising work in their departments with teleworkers. Nevertheless, teleworkers and line managers claimed that telework requires high levels of work organisation, which is congruent with findings from Baruch and Nicholson (1997).

*We have to find time slots when I am not teleworking in order to book meetings. If it is not possible, I change the day I telework (teleworker 1).*

*Less presence in the office requires the line manager to organise work more. It changes the relationships amongst professionals which requires them to change their way of communicating and the way they work together (teleworker 13).*

My findings suggest that providing reports for line managers is used to replace visually-based management methods. This points out that reports are a proxy to replace face-to-face meetings with line managers.

*The time to co-ordinate and to meet have to be completely formalised (Line manager 5).*

*Great clarity of objectives, the means used, everything is documented (Line manager 5).*

This also argues that line managers rely more on the face-to-face evaluation of their workers, which is congruent with at least one study done on the French working environment (Spony, 2003).

*If I am called where I telework, I am always available. My manager and I call each other almost systematically at 8.00am to talk about work in progress. At this time, we know we are not bothered to talk (teleworker 1).*

*Work is less 'micro managed' (teleworker 4).*

One line manager also claimed that being flexible is an important feature of managing teleworkers.

*Telework is a novel method which requires me to revisit how to manage people (intellectual interest), which develops the autonomy of the staff member (quality not very much developed in administrative functions in general), and working by objectives (line manager 10).*

Nevertheless, this same line manager emphasised that the telework situation generates jealousy.

*There is jealousy, however, because this work method is very much sought after in the department, but only authorised for one person at present (line manager 10).*

The expectations of line managers, in terms of managing staff in their departments, are negatively affected by telework. My findings bring to light jealousy and resentment generated by the implementation of telework in teams composed of office-based workers together with part-time non-office-based teleworkers. Moreover, one teleworker felt that telework means difficult work organisation for line managers (cf. table 4.26 in appendix 11). Two line managers agreed with this.

## **Reflection and effects on role set expectations**

It was difficult for me to perceive how line managers felt about having teleworkers in their departments. I felt that they were under pressure (through hierarchical power distance vis-à-vis the president of the Finistère). Nevertheless, I was not certain what interest the telework programme could have for line managers at this stage of the telework programme. My findings revealed that line managers experienced increased responsibilities, such as more complex organisation in work teams made up of teleworkers and non-teleworkers (when working on the same projects, for example). In the future, this could have effects on how many teleworkers could be supervised by the same line manager. This reveals that telework requires different skill sets for line managers.

It is unclear if replies from teleworkers were affected by their perceptions of power distance with their line managers. This reveals that teleworkers made greater efforts to facilitate work organisation in order to maintain their telework status. In the same vein, it is unclear if teleworkers hesitated to reveal their negative experiences with their line managers. This has repercussions in terms of how relationships are formed in the French context, such as the dependence on face-to-face contact to gain trust. This could also be affected by my intervention as an 'outsider' at the CGF. The replies in questionnaires could have been deeper, and thus could have revealed more insight, if I had been able to be perceived more as an 'insider' in the CGF. This could have been achieved by having closer contact with study participants, such as through interviews and increased time spent at the headquarters of the CGF in Quimper. By contrast, being an 'outsider' also allowed me to have increased 'distance' with the study. This means that I experienced less influence from the CGF organisational culture, since I was not part of it.

For line managers, my findings show that difficulties to organise work were resolved as the telework programme progressed. No results indicated that line managers were provided with guidelines or training to support them in the telework programme. Difficulties could have been generated due to a lack of motivation to participate in the programme. This argues that organising work in the telework context is more complex. My findings also indicate that telework requires increased work organisation and input from office-based colleagues (as reflected in replies from non-teleworking colleagues).



Nevertheless, negative aspects of work organisation are mitigated by teleworkers' part-time status (since they are also office-based part-time).

My findings indicate that teleworkers experience role strain and/or role overload since they are required to excessively organise their work. This is illustrated in comments which reveal that work must be planned in order to have access to documents or IT systems. Teleworkers' replies also point out that they plan their work differently when they are in the office versus when they are teleworking. This reveals an additional organisational burden for them.

Line managers indicate that their expectations in terms of work organisation are altered because telework requires higher levels of work follow-up and more intensive communication. This suggests that line managers perceive role stress because they are obliged to maintain two patterns of work organisation: one with teleworkers and one with their non-teleworking colleagues. My findings reveal that the role expectations of line managers vis-à-vis teleworkers, in terms of work organisation, are multiplied, versus those experienced with office-based workers.

#### **4.6 Telework as a means to attract workers**

Telework (as one flexible work option) is a work feature that can positively affect the social lives of employees (cf. Thomson, 2008). The literature also claims that flexible work, including telework, decreases employee turnover (Arnold *et al.*, 2006; Golden *et al.*, 2008). Illegem and Verbeke (2004), Golden (2007) and Golden *et al.* (2008) argue that telework makes employment more attractive. From a governmental perspective, it was clear to me that telework is a beneficial work feature to promote business in the Finistère (by improving working conditions to attract qualified employees).

#### **Telework as a job feature**

Comments below illustrate why telework is a desirable feature of work at the CGF.

*Yes, it is also an element that will be important to me if I look for another job at the CGF or in another department (teleworker 13).*

*Extremely, it can be important to think about when changing jobs, could be interesting if the organisation extended telework to other jobs (telework 15).*

One line manager claimed that less commuting makes telework programmes attractive.

*For people who live far away from their workplaces, being able to benefit from telework means that they will not only apply for jobs close to their homes, which avoid turnover, and in turn means higher quality of services provided (line manager 6).*

Despite cultural barriers (such as the role of hierarchy and the reliance on face-to-face relationships, which can impede the uptake of telework in France), recent statistics from the INSEE (2009) reveal that telework adoption has increased. My findings are also consistent with the literature which argues that telework increases organisational commitment (Golden, 2007; Golden *et al.*, 2008).

In another vein, teleworkers claimed that an additional feature of telework included the ability to hire staff who are not located close to the workplace.

*It (telework) is an additional benefit for the community/organisation to retain people who would otherwise look for work elsewhere (teleworker 2).*

*I will not apply to a job that does not allow me to telework (teleworker 3).*

Moreover, telework can fit more easily into schedules that require mobile work (including regular travel), such as in many jobs at the CGF (e.g., social workers).

From the perspective of one line manager, the main attraction of telework is to improve living conditions.

*Yes, it allows more comfort at work and for personal organisation (line manager 9).*

By contrast, another line manager felt that telework is a feature to attract employees.

*Maybe, but it is not a sufficient element to make it desirable to stay, it also depends on the manager, colleagues and the type of work (line manager 10).*

Flexible work methods, including telework, are part of an array of options to render jobs attractive. My findings reveal that teleworkers' and line managers' expectations are surpassed in terms of the perceived attractiveness of the CGF telework programme.

The majority of teleworkers and line managers in this study felt that telework programmes attract high calibre candidates. One teleworker and one line manager disagreed (cf. table 4.27 in appendix 11). Additionally, the majority of teleworkers and line managers felt that telework programmes are advantageous for workers (cf. table 4.28 in appendix 11).

## **Telework as an employment benefit**

My findings are consistent with Arnold *et al.* (2006), Golden (2007) and Golden *et al.* (2008) who claim that telework can weaken turnover intentions. Comments from one teleworker support this.

*Not concerning the employer, but rather the department. I wanted to change jobs at the organisation, but with telework in place, I would rather keep this advantage, linked to me current job (teleworker 1).*

Nevertheless, this could be affected by teleworkers' improved working conditions (cf. chapter four) and the perception that they are 'higher status' workers, which is pointed out by Haddon and Brynin (2005). Replies from line managers mirrored those from teleworkers, albeit with the caveat that they feel that telework is only one benefit amongst many.

My findings reveal that the expectations of teleworkers and line managers in terms of the ability of telework to retain staff are positively altered. This reveals that telework is perceived as a valuable work feature. Predictably, the majority of teleworkers also felt that telework programmes allow the CGF to compete with other employers to attract workers. By contrast, few line managers agreed with this (cf. table 4.29 in appendix 11). Moreover, three line managers felt that telework programmes could attract high calibre candidates (cf. table 4.30 in appendix 11), which is maintained by Lautsch *et al.* (2009).

## **Reflection and effects on role set expectations**

I was surprised to see that the participants in the study did not reveal more detail in their replies in terms of why telework is attractive. For me, this suggests that the CGF is experiencing culture shock since employees have to adjust to the telework situation. Culture shock refers to the difficulty to adjust to a new work environment. This has repercussions for non-teleworking colleagues and line managers because their roles are altered. Moreover, it is important in the French culture to understand one's perceived role in order to identify with hierarchical position.

The president of the Finistère wants to display the telework programme to attract people to the region. The eagerness to show the Breton identity also reveals the desire to be at the forefront of innovation in the eyes of the central French administration in Paris. This tension is not just historical, but is also illustrated by the thrust that was put into

the telework programme. The CGF not only administers services to people who live in the region and strives to improve their living conditions. After my initial visit to the CGF headquarters in Quimper 1<sup>st</sup> July 2010, it became clear to me that the Bretons were proud to share the telework programme to me as an ‘outsider’. In addition, there was an underlying desire to make the programme attractive since it was an example of a work feature that could radiate Breton culture (and as an innovator of new work methods) to other regions in France. I perceived this as not only a way of showing Breton pride, but also as an example of the cultural characteristics of Bretons (e.g., hardworking and innovative). In the French culture, the Bretons are characterised as a determined, even obstinate, people.

My findings reveal that teleworkers view telework as a benefit they wish to retain. Telework attracts them to work in line managers’ departments. My research suggests that telework makes a post more desirable, which is consistent with findings from Illegem and Verbeke (2004), Golden (2006), Lautsch *et al.* (2009) and in a flexible working context by Thomson (2008). They emphasise that telework allows workers to fulfil personal obligations. This is reported in the literature by Pratt (1984) and more recently by Golden *et al.* (2008).

Teleworkers’ role expectations are altered since they feel that they experience increased benefits. The expectations of teleworkers vis-à-vis line managers, in terms of work motivation, are increased since they feel that telework is a work feature they would like to retain. By contrast, their expectations are not altered in terms of looking for jobs in other departments or organisations, since telework is considered a valued benefit at the CGF.

Findings from line managers reveal that they do not experience altered expectations in their roles in terms of their ability to attract and retain staff. In their view, telework is an additional benefit to attract workers who otherwise would not be able to work because of geographical constraints (such as long distances from workplace to the home in the Finistère). Nevertheless, my findings indicate that line managers consider telework an important aspect of job design. Taking previous arguments into account, my findings suggest that line managers’ role expectations are altered, *de facto*, when telework is implemented in their departments. My findings uphold that line managers’ perceptions of work relationships are modified in the telework context because telework

upsets cultural and managerial traditions, such as perceptions of hierarchical distance (cf. Hofstede, 1980, 1991; Spony, 2003).

### **Summary**

This chapter discussed findings consistent with the literature and pointed out that:

- teleworkers experienced increased technical difficulties due to their distance from IT systems
- teleworkers' careers can be negatively affected by their lack of participation in networks
- telework requires increased qualities of teleworkers, notably the ability to work with colleagues in the office and at a distance (when teleworking)
- telework can increase work organisation difficulties
- telework is an attractive job feature

My study at the CGF also revealed issues that diverge from the literature, which are discussed in the following chapter.

## 5. Findings that diverge from the literature

In this chapter I aim to:

- explore the effects of telework on non-teleworking colleagues
- reveal how flexibility and work/life balance for teleworkers are perceived
- bring to light how telework affects managerial traditions

### 5.1 Effects on office-based colleagues

Since temporal and spatial features of the workplace are altered in the telework context, it is interesting to explore how relationships between teleworkers and office-based colleagues are affected. The literature claims that schedule flexibility is one benefit of telework (Felstead *et al.*, 2005). There is, however, little evidence which illustrates how flexibility affects office-based workers who collaborate with part-time teleworkers in the French culture.

#### Lack of face-to-face contact

Taskin and Bridoux (2010) posit that knowledge transfer between teleworkers and their office-based colleagues is negatively affected due to the telework context (i.e., because of less face-to-face contact). Their findings, however, do not consider the effects of decreased face-to-face contact in the French context. This also reveals that teleworkers need to see office-based colleagues face-to-face for certain tasks (i.e., tasks more easily completed in-person with colleagues). Eight teleworkers and four non-teleworking colleagues felt that for certain tasks teleworkers need to be seen in person (cf. table 5.1 in appendix 11).

#### Communication effects

The comment below indicates that teleworkers have adequate tools to communicate at a distance.

*In my job, there are no differences (between teleworkers and non-teleworkers). However, I need work tools more adapted to this job, done on a mobile basis – laptop computer and cell phone allow me to take care of requests wherever I am located (teleworker 13).*

Office-based colleagues claimed that teleworkers are considered ‘equal.’ Nevertheless, teleworkers needed to be treated differently because they were not available as spontaneously (face-to-face) as staff in the office during traditional working times.

*We are not used to phoning them (teleworkers) or sending an email (non-teleworking colleague 1).*

*I am less able to give information to line managers and colleagues, which brings 'surprises' and misunderstandings (non-teleworking colleague 7).*

My findings suggest that although part-time teleworkers theoretically have the same status as office-based workers, they are perceived differently because they benefit from increased spatial and temporal flexibility.

My findings reveal that the expectations of teleworkers are satisfied in terms of communication. By contrast, the expectations of their non-teleworking colleagues are negatively affected because they must rely more on non-face-to-face communication methods with teleworkers. One example is when non-teleworkers cannot speak face-to-face with teleworkers for an urgent request (when teleworkers are not present). This diverges from the current literature which does not consider this aspect of telework in the French context. Nevertheless, teleworkers and non-teleworkers in the CGF sample agreed that teleworkers and non-teleworkers can reach each other easily by phone or email (cf. table 5.2 in appendix 11).

Teleworkers and non-teleworkers also agreed that they can communicate well using phone or email (cf. table 5.3 in appendix 11). In addition, teleworkers claimed that telework can distance people from events in the workplace.

*Informal communication is reduced, personal relationships are affected by the distance (teleworker 6).*

*People at the office are aware of office life and services (teleworker 12).*

### **Work co-ordination difficulties**

My findings indicate that teleworkers' working times need to be co-ordinated with those of their non-teleworking colleagues. A teleworker claimed that communication became more 'technical' with office-based colleagues.

*Differences in the ways of communicating, it becomes more technical. However, when dealing with social issues, we are dealing with human beings and non-verbal communication is also important (teleworker 15).*

Interestingly, non-teleworkers claimed, as illustrated below, that they experience difficulties reaching teleworkers.

*Some minimal difficulties (being reached by telephone) (non-teleworking colleague 3).*

*Difficulty for colleagues to be able to know when the teleworker is available (non-teleworking colleague 10).*

My findings suggest that the expectations of non-teleworkers are negatively altered in terms of being able to easily reach teleworkers. This sheds new light on the literature in terms of how non-teleworkers experience decreased access to teleworking colleagues in the French context. As discussed in previous sections, teleworkers do not perceive these effects. Furthermore, more teleworkers than non-teleworkers agreed that meetings schedules needed to take into account teleworkers' schedules (cf. table 5.4 in appendix 11).

### **Observational effects**

Mayo (1933) argues that when workers (and in this study, teleworkers) are under observation, they want to perform well.

*You can be 'cut off' from the team. You may feel that since you telework you need to work more (teleworker 2).*

My findings indicate that teleworkers had similar responsibilities compared with office-based workers. Non-teleworkers agreed with this (cf. table 5.5 in appendix 11). My findings point out that telework creates tension for non-teleworking colleagues when teleworkers are not available. This indicates that telework generates perceptions of inequality due to teleworkers' increased spatial and temporal flexibility. Again, my findings contribute new insight into the literature from a cultural perspective.

Despite this, table 5.6 (in appendix 11) illustrates that teleworkers and their office-based colleagues felt that teleworkers are treated the same in meetings.

### **Collaboration difficulties between teleworkers and office-based colleagues**

Pöryiä (2009) claims that it is important for workers who collaborate virtually to maintain communication.

*Differences in the relationships with my colleagues (more communication). Non-teleworkers are more in touch with what is happening in the office (teleworker 3).*

This sentiment was echoed by teleworkers in comments below with the caveat that they can 'lose touch' with the office environment.



*Being away from the department means that I am less in the 'spirit' of the department (teleworker 3).*

*Being less 'in the know' in terms of what is happening in the office (people on holiday, absences) (teleworker 10).*

My findings suggest that there is resentment from non-teleworkers since they are bound to the office and must 'bear the burden' when emergencies arise. My findings reveal that teleworkers are considered as workers with better working conditions since they do not have to solve urgent problems (i.e., urgent problems which arise when they are not in the office). These issues are illustrated in replies from non-teleworking colleagues below.

*The department we are in has a small number of staff, given that there is one teleworker means that workers in the office are often solicited on the telephone (non-teleworking colleague 2).*

*Need to better follow up on ongoing projects and urgent matters, contact and share information, being able to consult documents which are archived (non-teleworking colleague 11).*

My findings reveal that the expectations of non-teleworking colleagues in terms of effective collaboration with teleworkers are negatively altered. Two teleworkers and two non-teleworkers agreed that it was more difficult to solve problems when teleworkers are away from the office. One line manager strongly agreed with this (cf. table 5.7 in appendix 11).

### **Effects of teleworkers' increased flexibility**

Replies from two teleworkers emphasised that telework allows for increased concentration.

*Higher levels of concentration for written documents: examples are writing and verifying the telephone directory of the territory (more than 130 people) (teleworker 13).*

*Calm to concentrate on tasks, to think and to write (teleworker 14).*

One teleworker emphasised that telework alleviated stress due to less office-sharing (despite disadvantages experienced due to decreased contact with colleagues).

*Depending on circumstances, social life in the office is eased, constraints or conflicts are easier to handle at a distance, but sometimes more difficult to solve without the contact of colleagues (non-teleworking colleague 4).*

My findings also suggest that this can become a disadvantage when teleworkers perceive undesirable aspects of increased flexibility (e.g., difficulties solving problems without assistance from office-based colleagues (as revealed above)) versus desirable ones (e.g., fewer interruptions (as revealed below)).

*Because of physical absence, it can be a way of being excluded – less presence in teams (teleworker 15).*

Teleworkers in the sample claimed that it is important for teleworkers to be able to anticipate workloads.

*Little time for unforeseen events, when one does not have a folder or documents which are needed, everything needs to be excessively anticipated (teleworker 4).*

*I have less informal exchange since I telework. My professional activities are more 'programmed.' I plan certain types of work when I telework, also when I am in the office, so that my work is separated, the work I do at home and the work I do in the office. It is especially true in terms of meeting with the public or colleagues. (teleworker 4).*

Despite this, most teleworkers and non-teleworkers agreed that teleworkers have comparable physical working conditions (cf. table 5.8 in appendix 11). Moreover, fifteen teleworkers agreed or strongly agreed that they receive pay comparable to non-teleworkers. Nine non-teleworkers agreed with this (cf. table 5.9 in appendix 11).

One teleworker claimed that increased independence can be a disadvantage. This is illustrated in comments below.

*Risk of isolation. Risk to lose contact with the life of the department (illness of colleagues, teamwork aspects). Necessity to adapt to my job, tasks and objectives, knowing that independence can also be a disadvantage (teleworker 13).*

Non-teleworkers claimed that distance away from the office makes teleworkers less aware of unofficial information.

*More difficult communication (non-teleworking colleague 7).*

*Lack of contact with colleagues (non-teleworking colleague 11).*

Another non-teleworking colleague claimed that teleworkers can be isolated from the team.

*A teleworker has to be more rigorous in their work, their hours – the risk is becoming isolated from the team (non-teleworking colleague 11).*

Increased independence for teleworkers negatively affects the expectations of non-teleworking colleagues in terms of teamwork. From the perspective of non-teleworkers, this indicates that teleworkers receive less feedback from team members because they are less physically present (despite their part-time presence in the workplace). Fewer teleworkers agreed with this (cf. table 5.10 in appendix 11). In addition, three teleworkers and five non-teleworkers agreed or strongly agreed that teleworkers can miss out on social aspects of work (cf. table 5.11 in appendix 11).

### **Reflection and effects on role set expectations**

As I sorted through data to identify common themes, I thought about what it would feel like to be a non-teleworking colleague at the CGF. Moreover, participating in the study as a non-teleworker could bring increased negative aspects of telework to light (such as increased burdens due to teleworkers' absence – these could also be fuelled by resentment due to a perception of 'unfairness' by non-teleworkers). I felt that I was evaluating sets of trade-offs. The telework programme at the CGF seemed to upset work relationships between teleworkers and their non-teleworking colleagues. They both needed to find respective 'comfort zones' in which they could operate. I found this an intriguing aspect of my study. In this dimension, using role set analysis was particularly beneficial to explore the relationships between teleworkers and their non-teleworking colleagues. It allowed me to see the 'other side of the coin' and investigate differences in viewpoints.

The comparison of teleworkers' and non-teleworkers' experiences working with each other reveals that telework upsets face-to-face relationships in teams, which is important in the French context. My findings in this section diverge from the literature, which hitherto does not evaluate the effects of decreased face-to-face contact in the French telework context in work teams. In terms of how work is organised in teams, my research points out that teleworkers and non-teleworkers have divergent responsibilities. This also suggests that line managers in the CGF are 'blinded' by their cultural role as a French 'cadre', or manager (and are distanced from subordinates). This reveals that due to higher power distance between line managers and the employees they manage in the telework programme, they are unaware of repercussions in teams composed teleworkers and non-teleworkers. Perceived jealousy and resentment were repercussions observed by line managers.

Results identify the difficulty office-based workers experience when teleworkers are not available for urgent tasks. My findings also reveal that isolation negatively affects the image of teleworkers in terms of commitment and participation in teams, as argued by Pöryä (2009). This is reinforced by claims that non-teleworkers do more ‘last minute’ work and that teleworkers in the CGF can be perceived as ‘privileged.’ These findings are echoed in studies by Felstead *et al.* (2005), Taskin and Edwards (2007) and Taskin and Bridoux (2010) which suggest that telework can negatively affect office-based workers. By contrast, none of the above-cited references elucidate the effects of culture on these relationships.

My findings also reveal that teleworkers’ roles are altered due to the more independent nature of telework. Moreover, this advances that non-teleworkers’ expectations are modified when they have to complete tasks due to the unavailability (due to physical absence or inability to be contacted by email or telephone) of teleworkers.

My findings reveal that non-teleworkers experience role stress. This is manifested in findings which suggest that there is increased difficulty for non-teleworkers to accomplish work tasks when teleworkers are not available. Moreover, role stress can also be fuelled by jealousy from non-teleworkers because they wish to take part in the telework programme. Though my findings in this study are cross-sectional, it could be argued that stress and burnout crystallised over time due to tension between teleworkers and their office-based counterparts.

## **5.2 Flexibility and work/life balance**

The literature maintains that flexibility for teleworkers is advantageous for families (Fagnani and Letablier 2004; Madsen, 2006; Morganson *et al.*, 2009; Shallenbarger, 1997; Thomson, 2008). Moreover, the literature argues that telework increases working hour flexibility which allows workers to complete tasks outside of traditional working hours (Madsen, 2006). Traditional working hours refer to schedules during the day, Monday to Friday. Nevertheless, this situation can generate a ‘spillover’ (cf. Zedeck and Mosier, 1990) effect on home life and work life. My findings diverge from the literature and reveal how telework affects work/life balance perceptions in the French context. Traditionally, flexibility and work/life balance are supported in France through state-supported initiatives, such as the 35 hour work week. My study findings explore the effects of a non-state-provided benefit (telework) in a French government

administration (the CGF) on employees' perceptions of flexibility and work/life balance.

### **Gender effects**

The teleworker sample in the CGF study was composed in its majority by women. This suggests that this group of workers sought more flexibility for family needs. Though teleworkers were not asked how many children they cared for, or if they had other caring responsibilities at home (e.g., for parents or other persons), replies from female respondents revealed that telework provided support for family responsibilities (e.g., female teleworkers claimed to be able to spend more time with children).

Being 'in the know' and participation in networks are important for career advancement (cf. Felstead *et al.*, 2005). Nevertheless, telework can negatively affect the participation of teleworkers in networks which require physical presence in the office. My study reveals the importance of physical presence in the French cultural context, which is decreased by telework.

### **Temporal effects on family life**

The literature argues that telework provides increased temporal flexibility, which is considered an advantage for workers (Madsen, 2006). Telework can provide increased satisfaction in terms of family life.

*Since I am able to modify my working time, I can better manage my personal life (teleworker 3).*

*Telework is a tool to provide flexibility between private life and work life (teleworker 15).*

In terms of the type of work done by teleworkers, my findings reveal that telework allows workers to better 'juggle' work and non-work tasks.

*Ease in work organisation and independence. Trust and responsibility. Better time management and 'border' between private and professional lives (I can spread my working time to go to a doctor's appointment, for example. Not using a day of paid leave) reduces commutes, increases financial gain, less fatigue (teleworker 13).*

My findings suggest that the expectations of teleworkers in terms of increased work/life balance are positively altered because of increased flexibility to manage time.

My findings also indicate that teleworkers and non-teleworkers feel that telework allows people to manage family responsibilities more easily. The literature claims that teleworkers experience decreased work/life conflict (Hogarth *et al.*, 2000; Madsen, 2006). The comments below provide deeper insight into how telework improves work/life balance for family life at the CGF (and in the French context).

*I can finally go to pick up my son at school and participate in some of his school events. Something else made an impression on me – my son is five years old and before I was able to telework he talked to me about his work in the school garden. I had told him that I had not see what he had done there. Naturally he replied to me “of course, it is always dark when you take me to school,” which is true since I had to leave him at childcare at 7.30am. Telework has allowed me to drive him a bit later in the morning, but more importantly to pick him up earlier in the evening two days a week. That is happiness...(teleworker 2).*

Felstead *et al.* (2002) and Thomson (2008) also argue that work/life balance allows better management of home life. Moreover, my findings diverge from the literature and point out that family life is positively affected because of increased temporal flexibility in the French context.

*Easier to make appointments after telework is done since there is no travel time (teleworker 8).*

*Easier work organisation which makes it easier to manage personal and professional lives, in a context where family life is becoming more important. A different view of work in a changing society. Telework is a tool to provide flexibility between private life and work life (teleworker 15).*

Most teleworkers agreed or strongly agreed that they had more flexibility to manage non-work related schedules. Findings from non-teleworkers mirrored teleworkers' replies (cf. table 5.12 in appendix 11).

Most teleworkers and non-teleworkers agreed that teleworkers have more flexibility in arranging work schedules (cf. table 5.13 in appendix 11) and in managing time more effectively (cf. table 5.14 in appendix 11).

My findings reveal that the expectations of teleworkers in terms of being able to meet family obligations are positively affected. Most teleworkers and non-teleworkers felt that teleworkers benefit from increased work/life balance, which is consistent with attitude scale findings (cf. table 5.15 in appendix 11).

## **Unexpected effects on the work environment**

Surprisingly, benefits of increased work/life balance for teleworkers can negatively affect relationships with non-teleworking counterparts. This is illustrated below.

*If a teleworker is at home, it is easier to manage family life (bringing children to school), making appointments during the day, whilst keeping up with professional obligations (non-teleworking colleague 4).*

*Less travel time, positive aspect for family life (non-teleworking colleague 10).*

It is important to underscore the dichotomy which separates teleworker benefits in terms of work/life balance and the sentiment of inequality experienced by office-based workers. Since teleworkers in the sample are also perceived as part-time office-based workers, regular contact with office-based colleagues can exacerbate the feeling of having a ‘separate’ status.

My findings reveal that although telework allows increased work/life balance, it can also be a source of overworking.

*Rigorous organisation, planning work tasks, a more sharpened sense of duty can bring stress (teleworker 6).*

*Not easy to stick to hours – work more than initially planned (when working at home) (teleworker 16).*

Non-teleworkers claimed that telework creates a ‘spillover’ between work life and home life (Zedeck and Mosier, 1990), as previously discussed through the lens of teleworkers. Nevertheless, my findings shed new light on perceptions of work/life balance in the French context. My findings also reveal that undesirable effects of telework (such as difficulties experienced with office-based colleagues) are counterbalanced by benefits.

*More interference between work life and home life (non-teleworking colleague 9).*

*Risk of difficulty to separate personal and professional lives, rigour is necessary in order to not be overwhelmed (non-teleworking colleague 6).*

Fewer teleworkers than non-teleworkers felt that telework spills over into personal lives (cf. table 5.16 in appendix 11). In addition, fewer teleworkers than non-teleworkers felt that teleworkers have more difficulties to cut off from personal worries at work (cf. table 5.17 in appendix 11).

## **Reflection and effects on role set expectations**

I expected replies in this section to be obvious: flexibility and work/life balance would be perceived as positive work features. I was nevertheless surprised to discover that non-teleworking colleagues expressed tension because of increased flexibility for teleworkers (and increased work/life balance satisfaction).

After drafting this section, I took into consideration the importance that workers in the French context place on nationally-supported work/life balance initiatives, such as aid from the state for childcare. From a French perspective, my findings in this section denote the growing importance of non-governmental initiatives to increase work/life balance for employees in France (such as telework). My findings in this section have cultural implications: the telework initiative of the CGF represents a work benefit that is not defined by law, but rather is a work feature above and beyond the legal requirements of employers. This reveals that the telework initiative at the CGF is uncommon practice for a French public administration (which relies on the labour law to provide employee-related benefits, such as flexible schedules (including telework)).

Despite work/life balance advantages generated by the increased use of part-time telework (Siha and Monroe, 2006) at the CGF, undesirable effects were experienced. My findings show that teleworkers and non-teleworkers feel that teleworkers have an additional burden to manage overworking. This implies that telework can create higher levels of work/life conflict. This conflict stems from the inability of workers to balance home and work responsibilities because of increasingly blurred work/life boundaries. This aspect of telework in the French context is unidentified in the literature.

My findings reveal that teleworkers experience decreased role conflict. Due to increased spatial and temporal flexibility, my research points out that teleworkers are able to meet expectations of family roles more easily than office-based colleagues. This indicates that the ability to handle multiple roles, as in role 'overload,' is generated by telework. Moreover, my findings reveal that teleworkers who experience less role conflict (between professional roles and family/career-related roles) also experience less stress.

Conversely, from the perspective of non-teleworkers, my findings suggest that they experience altered working conditions due to the absence of teleworkers. This increases their role stress. This is generated by the divergent working conditions experienced by



teleworkers vis-à-vis their non-teleworking colleagues (teleworkers benefit from increased spatial and temporal flexibility).

### **5.3 Managing teleworkers**

The literature claims that line managers experience difficulty managing teleworkers because of the lack of physical presence of teleworkers (Taskin and Edwards, 2007; Richardson, 2010). Moreover, line managers in the French context are influenced by cultural norms (Linhart and Mauchamp; Spony, 2003; Stroobants, 2010), including stratified perceptions of employee categories (Stroobants, 2010). This suggests that line managers' hierarchical relationships in the traditional work context are shaped by culture. In this vein, my findings indicate that these relationships are altered in the French public administration telework context because face-to-face communication is decreased, which adds new insight into the current literature.

#### **Teleworker availability**

Telework at the CGF generated 'stretched' working hours.

*Not easy to stick to hours – work more than initially planned (when working at home) (teleworker 16).*

It could be argued that telework facilitated overtime work that already took place. It is, however, unclear whether there was a latent expectation from line managers for teleworkers to produce more outside of traditional office hours. Line manager replies emphasise teleworkers' availability.

*When the teleworker is teleworking, being able to be present to meet people does not take place when their colleague is not there (welcome desk, secretaries) (line manager 2).*

Research from Spony (2003) indicates that the French working culture promotes long hours and that 'cadres' (teleworkers in the CGF sample fit into this employment category) are expected to be 'present,' or reachable. This also exemplifies a stratified perception of the workplace in the French context, as claimed by Pinçon and Pinçon-Charlot (2007). My findings suggest that the expectations of teleworkers in terms of their ability to be reached by colleagues (and/or line managers) are negatively altered in the telework context. My findings thus add a new dimension to the literature on this issue from a French cultural perspective.

One teleworker and no line managers felt that telework allows line managers to assign projects outside of traditional office-based hours (cf. table 5.18 in appendix 11). Nevertheless, my findings maintain that organising meetings is difficult for line managers. This indicates that project management in teams is affected because it requires participation from teleworkers and office-based staff.

*We have to find time slots when I am not teleworking in order to book meetings. If it is possible, I change the day I telework (teleworker 1).*

*In my job, it is difficult to respect two fixed days per week, because of constraints, urgent appointments, meetings (teleworker 5).*

My findings suggest that teleworkers' expectations in terms of their ability to be present for office-based tasks are negatively affected in the telework context. However, the majority of teleworkers and line managers did not feel that telework interrupts projects (cf. table 5.19 in appendix 11).

### **Work co-ordination and supervision**

Line managers claimed that telework requires increased monitoring.

*In my experience here, less fatigue because of transportation, necessity to better co-ordinate the time to share information in the team, you need to be clear in your objectives and be at ease to follow them up (line manager 5).*

Spony (2003) claims that it is important to closely supervise subordinates in the French working culture. However, my findings illustrate the importance of supervision for line managers in the French *telework* context. By contrast, another line manager evoked no difficulty in terms of work co-ordination.

*Telework has not had an effect on teamwork, staff who telework wanted to adapt their teleworking days according to meeting times, they have a cell phone and a laptop computer connected to internal email, they can therefore be reached by their colleagues or can reach their colleagues easily (line manager 6).*

This same line manager claimed that the telework situation does not affect teamwork, which is inconsistent with findings from Felstead *et al.* (2005), Jacobs (2004) and Taskin and Edwards (2007). This also has cultural implications since line managers in the French context rely on face-to-face contact to supervise. It is important to note that since the CGF telework programme began on a pilot basis at the time of this study, few employees at the organisation participated. Due to this, the CGF telework study generated interest from non-teleworking colleagues. Despite this, line managers in the

sample did not feel that work delegation is more difficult for teleworkers (cf. table 5.20 in appendix 11).

### **Office tension**

It is unclear if telework alleviated personnel conflicts at the CGF which existed before the programme's implementation. Nevertheless, one teleworker evoked latent management difficulties (referred to below as 'constraints' and 'conflicts').

*Depending on circumstances, social life in the office is eased, constraints or conflicts are easier to handle at a distance, but sometimes more difficult to solve without the contact with colleagues (teleworker 4).*

Again, findings from line managers indicate that telework may not relieve office-tension, but, on the contrary, generate it. Line managers identified jealousy from non-teleworking colleagues.

*The only difference between teleworkers and non-teleworkers is perhaps the sense that there is jealousy (or unfairness?) since I have been teleworking for almost one year, many colleagues want to do the same (line manager 2).*

Again, my findings reveal that teleworkers' expectations in terms of being considered as equals (i.e., with the same perceived status) in office-based work teams are negatively altered in the CGF (French) context. Moreover, few teleworkers and line managers felt that telework could mitigate personnel conflicts in the office (cf. table 5.21 in appendix 11).

### **Communication difficulties and lack of face-to-face contact**

Communication difficulties with line managers are illustrated in replies from teleworkers below.

*Higher percentage of teleworkers can make communication more difficult in a team (teleworker 4).*

*Less presence in the office requires the line manager to organise work more. It changes the relationships amongst professionals which requires them to change their ways of communication and the way they work together (teleworker 13).*

The literature claims that visual aspects of managing telework are important (Felstead *et al.*, 2005; Siha and Monroe, 2009; Spony, 2003; Tietze *et al.*, 2009; Richardson, 2010). By contrast, the majority of teleworkers and line managers did not feel that it was more difficult to supervise teleworkers (cf. table 5.22 in appendix 11). In another vein, three

line managers felt that there is less personal communication with teleworkers. Furthermore, five teleworkers felt that there is less personal communication with line managers (cf. table 5.23 in appendix 11).

Teleworkers claimed that face-to-face contact remained important in the CGF working culture.

*Line managers feel they (teleworkers) need to be more present – culturally workers feel they need to be seen and loyalty is built through face-to-face contact. Managers are shocked when workers are not available. Otherwise, other workers want to telework too (teleworker 2).*

*Absence of physical presence. Implementing telework requires a lot of minutes taking (teleworker 8).*

Nevertheless, my findings reveal that line managers experience difficulties when delegating work.

*Some line managers who have trouble trusting employees and delegating – general feeling of insecurity (teleworker 14).*

Despite this, findings from teleworkers and line managers indicate that they did not perceive more difficulties managing teleworkers (cf. table 5.24 in appendix 11).

### **Work evaluation difficulties**

One line manager revealed that it is more difficult to evaluate work done by teleworkers.

*It is sometimes difficult to define objectives that are quantifiable, this makes it more difficult to evaluate performance (line manager 1).*

*Evaluations are difficult for certain types of jobs – it is really a weakness which is exacerbated by telework (line manager 1).*

Another line manager claimed that telework can strengthen and develop working relationships, as illustrated below.

*Deeper professional relationship with teleworker, organisation of work reflected upon and defined together (line manager 7).*

My findings indicate that telework upsets the expectations of line managers to maintain effective relationships with teleworkers for two main reasons. First, line managers having difficulty using work evaluation methods in place for teleworkers. Second, relationships based on face-to-face contact, which are predominant in the French

context are altered due to the increased temporal and spatial flexibility experienced by teleworkers.

### **Performance**

As previously discussed, it could be suggested that a Mayo, or observational, effect (Mayo 1933) motivated teleworkers to perform well. Nevertheless, it is unknown if a performance evaluation exercise took place during the period of the telework programme launch (from October 2009 to July 2010).

There are few qualitative findings linked to the management of teleworker performance. Nevertheless, one teleworker indicated that management style needs to be adapted to the telework environment.

*'Classic' management style needs to be adapted. Difficulty to find the 'right' number of teleworkers who should work in the department (teleworker 2).*

Another teleworker claimed that organising work with office-based colleagues was important.

*(Telework) makes managers reflect on work organisation, could be a solution when there is a conflict (teleworker 15).*

In turn, this also can affect the way telework performance is evaluated, such as when taking into consideration teleworkers' absences from the office. No teleworkers and one line manager felt that it is more difficult for line managers to manage performance (cf. table 5.25 in appendix 11).

Five teleworkers and two line managers felt that telework facilitates performance management (cf. table 5.26 in appendix 11). In terms of teleworkers' drive to perform well, neither teleworkers nor line managers felt that telework decreased motivation for workers (cf. table 5.27 in appendix 11).

### **Reflection and effects on role set expectations**

I felt that line managers were 'thrown into the water to learn how to swim' in the CGF telework programme. Though they received information at meetings with the CGF telework co-ordinators, they were forced to cope with the telework situation on their own. From a cultural viewpoint, for line managers, not being able to communicate with subordinates face-to-face could be perceived as a loss of power and status. This is deeply rooted in the French culture and part of the identity of a French 'cadre' or

manager. Moreover, I felt that the line managers who participated in this study were learning as the programme progressed. No line managers teleworked. They could not 'connect' with the experiences of their subordinates. I am uncertain how the roles of line managers in the CGF telework programme will evolve over time.

After drafting this section, it became apparent that the 'proximity' between teleworkers and their non-teleworking colleagues allowed me to gain increased insight. This was more difficult for me to perceive from line managers (due to decreased hierarchical proximity between line managers and teleworkers). This underscores that formality and power distance is high in the line manager/subordinate relationship in the French context. Moreover, I felt that the line managers in the study perceived a loss of control working with teleworkers, because they could not see them.

My findings suggest that managing teleworkers requires sets of skills that are different from those required for office-based workers. At the CGF, teleworkers and office-based workers were managed by line managers simultaneously. This is important to consider, since there is no evidence in the sample of the skill sets (e.g., communication skills, IT skills) possessed by line managers which could be beneficial in the telework environment, except claims that they were all experienced in their jobs and had degree level educations. This reveals an additional burden for line managers who participated in the CGF telework programme.

Office tension emanated from managing teleworkers together with non-teleworkers. My findings clearly indicate that office tension was generated due to jealousy, which is echoed in findings from Felstead *et al.* (2005), Frauenheim (2006), Golden (2007) and Taskin and Edwards (2007). However, through a cultural lens, my research shows that one root of this stemmed from line managers' reliance on face-to-face management methods. This is consistent with traditions in the French working culture (Spony, 2003; Stroobants, 2010), yet is at odds with the teleworking culture, which requires management with decreased face-to-face contact. Furthermore, this could also be affected by the organisational culture (such as that of the CGF), which emphasises face-to-face management methods.

Proxies to replace face-to-face contact and control, such as reports, were implemented by line managers. This is identified in findings from Taskin and Edwards (2007) who studied teleworkers in a Belgian cultural context, and from Peters *et al.* (2010) in a

Dutch context. Nevertheless, my research adds another cultural dimension by exploring this in the French context. Finally, it could be argued that performance management methods used by line managers are influenced by the need for face-to-face contact. My findings suggest that these methods have not been modified after the implementation of the telework programme at the CGF.

Findings from teleworkers reveal that role expectations from line managers are altered in the telework context due to increased spatial and temporal flexibility. My findings also indicate that teleworkers experience role stress in terms of their desire to be viewed as effective workers, despite their decreased visibility. Teleworkers feel that they experience role stress because they must anticipate their workloads and modify their communication patterns with line managers.

Findings from line managers suggest that they experience altered role expectations in terms of staff management. This is illustrated in replies which reveal that relationships between line managers and teleworkers are modified because of increased planning and communication. This argues that line managers experience role conflict since they carry the role of a line manager for exclusively office-based staff *and* the role of a line manager for part-time teleworking staff. My findings indicate that the expectations of these two roles are different.

## **Summary**

This chapter discussed issues in my study that diverged from the literature. It notably argued that:

- telework can create tension in the French context because it upsets traditional roles (such as roles of teleworkers vis-à-vis those of their office-based colleagues)
- telework upsets the French cultural tradition of providing work-related benefits (such as flexibility and work/life balance through telework) solely from the state in public administrations
- managing teleworkers in the French cultural context upsets how line managers supervise employees because of decreased face-to-face contact

My study also explored how teleworkers perceived their working conditions and telework programme satisfaction, which is discussed in the following chapter.

## **6. Findings relative to the study context**

The findings explored in this chapter, by their nature and in a strict sense, are neither consistent with, nor divergent from, the literature. They point out how the CGF telework programme affects study participants' working conditions. Findings in this chapter also reveal study participants' satisfaction from the telework programme. Discussions in this chapter provide deeper understanding of the work context experienced by study participants at the CGF.

In this chapter I aim to:

- bring to light how working conditions are perceived for teleworkers at the CGF
- reveal perceived satisfaction of the CGF telework programme

### **6.1 Perceived working conditions**

In the following discussions, physical working conditions refer to tangible aspects of workspaces (e.g., office space). Non-physical working conditions refer to non-tangible aspects of workspaces (e.g., less stress).

#### **Effects on office life**

Teleworkers claimed that non-teleworking colleagues were more 'in touch' with the office environment. This argues that maintaining networks is more difficult for teleworkers because they do not benefit from the proximity of office life.

*Differences in the relationships with my colleagues (more communication). Non-teleworkers are more in touch with what is happening in the office. (teleworker 3).*

Non-teleworking colleagues also expressed the need for teleworkers to be present. Essential information to accomplish work is shared through written documentation and oral exchange with colleagues. This was revealed by a non-teleworking colleague below.

*Difficulty for colleagues to be able to know when the teleworker is available – phone calls are taken by office-based colleagues, documents for work in progress may not be available for the teleworker (non-teleworking colleague 10).*



In terms of physical workspace, ten teleworkers in the sample have at least part of a room at home to work in. No teleworkers claimed that their home workspace does not meet their needs (cf. table 6.1 in appendix 11). No comments indicated that a lack of space was the main reason why home work spaces did not meet their needs.

In terms of non-physical working conditions, the majority of teleworkers and non-teleworkers felt that teleworkers do not experience difficulties. Seven teleworkers and four non-teleworkers strongly disagreed that this is more difficult (cf. table 6.2 in appendix 11). Conversely, the majority of teleworkers, and to a lesser degree non-teleworkers, did not feel that it is more difficult for teleworkers to find out what is going on in their departments (cf. table 6.3 in appendix 11).

### **Stress**

Telework has positive effects on alleviating work-related stress for teleworkers at the CGF.

*Less fatigue than a non-teleworker since travel distance is shorter (teleworker 3).*

*Less fatigue and less stress (teleworker 12).*

Another teleworker offered insight into additional benefits in terms of work quality.

*I work better, am more productive and less interrupted (teleworker 11).*

Non-teleworkers also expressed benefits due to less stress and better health.

*Less commuting, less stress from commutes and lower transportation costs. The teleworker has health issues and is certainly less tired and feels better (non-teleworking colleague 6).*

*Less stress, tension from work (non-teleworking colleague 9).*

The above discussions illustrate that teleworkers experience less stress due to less fatigue from commuting. My findings reveal that the expectations of teleworkers are exceeded in terms of benefits perceived from less stress. The above arguments also reveal that their expectations in terms of healthy working conditions (e.g., less fatigue, less stress) are positively affected by the telework situation.

All but one teleworker felt that teleworkers experienced less stress due to telework. Non-teleworkers also felt that teleworkers experience less stress (cf. table 6.4 in

appendix 11). Teleworkers and non-teleworkers also felt that teleworkers experienced fewer health-related problems (cf. table 6.5 in appendix 11).

### **Fewer interruptions**

Findings from teleworkers revealed that fewer interruptions is an advantage of telework. My findings indicate that this allowed teleworkers to plan and complete tasks within the traditional workday.

*I am not constantly interrupted by others. I am able to concentrate better (teleworker 1).*

*The obligation to be more methodical allows me to work better (work tasks are more easily planned), teleworking days break monotony (teleworker 11).*

Non-teleworkers also emphasised that fewer interruptions is a benefit for teleworkers.

*Teleworkers work faster at home because of less commuting. It is easier to organise work, teleworkers are not interrupted by people coming into the office (non-teleworking colleague 1).*

*The teleworker is not interrupted as often as colleagues in the office and by clients. More availability to follow up on work (non-teleworking colleague 4).*

Teleworkers and non-teleworkers felt that teleworkers experienced fewer interruptions (cf. table 6.6 in appendix 11) and both felt more in control (cf. table 6.7 in appendix 11).

### **Reflection and effects on role set expectations**

When I tried to picture myself as a teleworker at the CGF, I could envisage how I would want to prove that I could be an effective employee, since I benefited from advantages (such as increased spatial and temporal flexibility) not offered to other workers. I felt that the roles of teleworkers were also affected by my intervention as an ‘outsider’ (outside researcher). Since teleworkers knew they were being studied, and in ‘the spotlight’, they would tend to express the positive aspects of their work situation.

When drafting discussions in this section, it was difficult for me to view how teleworkers and their non-teleworking colleagues perceived working conditions due to my ‘outsider’ view. Moreover, since I have never been in the role of a non-teleworking colleague (I have been in the role of a teleworker), I had to try to ‘balance’ any preconceived ideas in my mind. It was difficult for me to balance perceptions as I reviewed raw data in this section. I had to take my role as an ‘outsider’ to the CGF into consideration whilst interpreting my findings.

I was aware of hierarchical perceptions in a French public administration, such as at the CGF, since I had spent time at the headquarters in Quimper 1<sup>st</sup> and 2<sup>nd</sup> July 2010. I felt that this awareness helped me make more ‘balanced’ judgments when interpreting the perceptions of teleworkers and their line managers, as one example (since teleworkers are hierarchically distanced from their line managers in the French context). I compared the CGF context with my own experiences working with the French government when I was a liaison officer in Paris (working with the foreign office and several other related public administrations).

Teleworkers in the sample worked full-time at the CGF and teleworked (within their full-time hours) on a part-time basis. Teleworkers benefited from contact time with the office environment in addition to advantages from telework whilst at home (e.g., increased spatial and temporal flexibility). Findings from teleworkers and their non-teleworking colleagues indicate that benefits from telework include less stress, fewer interruptions, more control and better health. Teleworkers benefit from their part-time teleworker status since they also benefit from physical contact in the office with colleagues (and line managers).

Predictably, teleworkers and non-teleworking colleagues indicate that being away from the office can also be a disadvantage. My findings reveal, however, that there are more positive reasons than negative ones to be a part-time teleworker in the CGF, taking working conditions (physical and non-physical) into account.

In terms of physical working conditions (e.g., office furnishings off-site), my findings reveal that teleworkers’ expectations are satisfied. My findings indicate that teleworkers are able to function in physical work environments outside of their habitual office space. In this section, physical working conditions are restricted to the tangible office environment, excluding IT-related aspects.

In terms of non-physical working conditions (e.g., less stress), my findings reveal that teleworkers’ expectations are satisfied in a superior fashion compared to those of non-teleworkers. Replies from non-teleworking colleagues confirm that teleworkers experience superior non-physical working conditions.

## 6.2 Telework programme satisfaction

Work satisfaction in the French work environment emanates in part from the status of the job position one holds within hierarchies (claimed by Spony, 2003 and Stroobants, 2010). Since telework provides increased temporal and spatial flexibility for those who participate, it is interesting to evaluate how it affects perceived work satisfaction. It is also valuable to understand why teleworkers and line managers chose to take part in the CGF telework programme.

### Satisfaction due to increased flexibility

Several teleworkers claimed that participation in the CGF telework programme was to avoid transportation difficulties. Two line managers indicated that fewer absences and higher productivity were key reasons to participate in the telework programme. Three claimed that it could bring better working conditions for staff. Two revealed that they did not choose to participate voluntarily. My findings point out that despite teleworkers' eagerness to participate in the CGF pilot programme, line managers felt that they did not have a choice. Nevertheless, my findings also indicate that line managers participated in the telework programme because its potential advantages outweighed disadvantages.

Comments from teleworkers emphasised the ability to better organise work due to increased temporal flexibility. Teleworkers also claimed that they were enthusiastic to participate in the CGF telework programme because of increased work benefits.

*To gain time up to one day per week. Better quality of life. I remain very flexible. If I had a chance to telework up to three days a week I would, but only if my work activity were lower (teleworker 1).*

*Work flexibility which allows me to better manage tasks, my workload, work organisation and travel (teleworker 13).*

Other teleworkers appreciated having the ability to better balance home and work responsibilities.

*Less fatigue due to travel. Ease to organise family and personal lives. I have gained more time for life, rather than spending time travelling (teleworker 2).*

*Less distance between home and work – 240 kilometres! Available for family (teleworker 16).*

## Perceptions of well-being

Line managers claimed that increased teleworker well-being was a benefit for teleworkers.

*A way of working that facilitates well-being at work (line manager 4).*

*To facilitate their (teleworkers') personal lives (home far away) (line manager 5).*

*I manage a department in a rural part of the region where distances are significant, staff spend approximately 20% of their time commuting which generates fatigue and expenses for staff and for the department (line manager 6).*

Other line managers emphasised that the telework experiment affects management styles.

*To experiment with another type of work relationship (line manager 3).*

*To explore new methods of working (line manager 4).*

*Because it (telework) appears to be pertinent to me in terms of work/life balance, working environment, well-being at work, as well as in terms of management and the organisation of my department (line manager 10).*

It is useful to evaluate the criteria line managers used to choose teleworkers (when they claimed they could do so). Line managers claimed that geographical distance from the workplace was a key consideration.

*Home far from the workplace, trust (line manager 5).*

*People who live far away from the workplace (line manager 6).*

Teleworkers were enthusiastic to participate in the pilot programme, without reservation (cf. table 6.8 in appendix 11). By contrast, difficulties revealed by line managers in qualitative replies, with the exception of IT-related problems, are linked to their difficulties managing teleworkers.

The majority of line managers claimed that teleworkers held the same jobs as office-based workers in the GCF sample (cf. table 6.9 in appendix 11). This is congruent with the types of primary sector jobs carried out by teleworkers and non-teleworkers in the CGF sample.

## **Reflection and effects on role set expectations**

I discussed cultural issues with teleworkers and line managers at a cocktail reception after the formal meeting in Quimper (where I also was introduced as a researcher) on 1<sup>st</sup> July 2010. I was intrigued by their reflections on their own culture. Teleworkers and line managers at the CGF appeared to be comfortable speaking to me about their experiences. They knew that although I was an English speaker, I was also from a French cultural background. Moreover, when I spoke with them, I respected cultural protocol, e.g., using ‘vous’ and all proper titles after saying ‘Madame’ or ‘Monsieur.’ I had previously taken notes in the car driving to the meeting so that I could remember their names and titles. Nevertheless, I did have to ask a CGF telework co-ordinator to help me pronounce the Breton names of people correctly. I was familiar with some Breton pronunciation but had to confirm the culturally appropriate form to use. Names can be pronounced with a Breton pronunciation or an altered French version (which is the accepted form for non-Breton French speakers).

At the cocktail reception conversations were held in formal French, which could create some barriers. Despite this, the tone of the speech was frank. Teleworkers and line managers at the CGF mentioned to me that telework was an opportunity to use an ‘Anglo-Saxon’ (this was a term they used) work method because it relied on less face-to-face contact. This was also an indication that the Bretons were taking an initiative to implement a ‘foreign’ concept (telework in France is viewed as a work method from the English-speaking world). I observed that line managers took the lead in discussing these issues, especially in the presence of teleworkers. Culturally, I perceived this as an expression of hierarchical differentiation. Despite the hesitation of some line managers to promote the telework programme, I did not feel that any comments from them indicated a desire to drop out. Again, on a cultural level, I felt that participants in my study needed to make an effort for the telework programme to succeed because it was an initiative of the president of the region.

As I went through my findings in this section, it was also important for me to be able to explore perceptions ‘below the surface.’ It was foreseeable that study participants who teleworked would be satisfied with the programme, since this was communicated in the meeting held at 1<sup>st</sup> July 2010 in Quimper. However, from a cultural perspective, the power distance (‘power distance’ referring to the perceived power of authority) which emanated from the president of the region most likely biased perceptions. This reveals

that in the French context, because the president of the Finistère was enthusiastic about the telework programme and wanted it to succeed, it was culturally appropriate for study participants to agree (due to the power distance and authority of the president, which, culturally, generates high power distance with subordinates). Despite these constraints, my findings provided beneficial insight into perceived satisfaction of the telework programme.

My findings reveal that teleworkers and line managers are satisfied with the telework programme at the CGF. Moreover, my findings suggest that there are few perceived barriers for effective telework implementation, except for tension in teams (when teams are composed of teleworkers and non-teleworkers) and more difficult schedule coordination. In terms of telework programme satisfaction, my findings reveal that the role expectations of teleworkers and line managers are satisfied.

### **Summary**

This chapter explored findings which showed that:

- perceptions of working conditions for teleworkers are satisfactory despite negative effects of telework
- the telework programme at the CGF is perceived as a success

My study also allowed me to gain deeper insight into how telework affects not only teleworkers, but also their interaction with non-teleworking colleagues, their line managers, and the CGF as an organisation. This is discussed in my conclusions in the next chapter.

## 7. Conclusions

### 7.1 Concluding the study

*This section provides reflections on the writing-up of this study and discusses how conclusions were drawn*

Several elements which shaped this study emerged over time. After the 1<sup>st</sup> July 2010 meeting in Quimper with the CGF telework programme co-ordinators, various regional actors and future study participants (line managers and teleworkers at the time), it became increasingly evident that my experiences carrying out this study influenced my interpretation of findings (cf. Charmaz and Bryant, 2011). Sociologists Pinçon and Pinçon-Charlot (2007) advance that researchers inevitably become deeply involved with their investigations. This became apparent during my attempt to piece together my findings (from attitude scales and quotes in the form of MUs (Giorgi, 1985, 1994)) to draft chapters four, five and six. One example is the difficulty I experienced interpreting data from ‘insider/outsider’ roles (cf. Dwyer and Buckle, 2009).

This meant that I had to work as a bilingual/bicultural person, trying to distinguish the French cultural standpoint from the Anglo-American one as I worked through the raw data. In sorting my findings, it became apparent that some meanings were deeper than they appeared to be on the surface. One example is the usage of formal French during the interview I conducted. If I would have been able to meet the interviewee in person (the interview was held on the telephone at the CGF headquarters in Quimper), I could have developed a closer relationship. Again, this assumes that face-to-face contact in the French cultural context would allow for higher levels of trust.

The use of qualitative data (in the form of quotes using MUs (Giorgi, 1985, 1994)) was essential to pick up depth (supported by frequency tables (which provided patterns of participants’ opinions without detailed accounts)) (cf. qualitative data retrieved from questionnaires in appendix 11). During data analysis, the participants in the study became familiar individuals to me. In addition, they developed identities which became recognisable. This reveals that I perceived, through the interpretation of my findings, the roles of study participants. Furthermore, I began to mentally construct my interpretation of their identities. This is supported by Cepeda and Martin (2006), Charmaz and Bryant (2011), Miller and Glassner (2011) and Pinçon and Pinçon-Charlot



(2007) who argue that the interaction between researchers and study participants affects the interpretation of meaning.

My continued involvement in the French culture, and work-related issues, influenced the interpretation of my findings, either consciously or unconsciously. This manifested itself during my reflection on the effects of culture on French management practice (I have worked in an English/French bilingual environment, live in a multicultural/multilingual country (Switzerland) and am American/French).

Interestingly, whilst doing this study I was often blinded by French cultural assumptions that I had internalised. The interpretation of my findings brought these issues into sharper focus. One example was the use of formal and informal French by respondents in written replies. This reveals that I was at a distance, since I had never been seen by many respondents, except for those who met me at the CGF meeting beginning July 2010. Again, this underscores the role of face-to-face contact in relationship building in the French cultural context.

My interpretation of formal French was interpreted as higher social distance.

Nevertheless, a deeper interpretation revealed that it was culturally 'appropriate' to discuss in formal French because respondents were aware that I was not a member of the primary group researched (which is argued by Miller and Glassner (2011)), and not a member of the CGF. Moreover, this reveals distance between respondents and me, which could also generate bias due to a lack of trust to reveal depth in answers (cf. Miller and Glassner (2011) and Silverman (2008)).

Furthermore, my interpretation of findings underscored cultural implications of telework, which were often initially unrecognisable. One example is study participants' perception of power distance (cf. Hofstede, 1980). This could generate response bias since participants who perceive higher levels of power distance would not reveal opinions that oppose authority (teleworkers vis-à-vis their line managers, as one example). This also reveals that my 'lived experiences' (referring to my experiences in the French culture) had an influence on the interpretation of 'lived experiences' of the study participants, which is again identified in the concept of MUs (Giorgi, 1985, 1994), and supported by phenomenological psychology (Giorgi, 1984).

Notwithstanding, cultural implications in this type of study are often implicit, which is also pointed out in the work of Hofstede (1980, 1991) and Spony (2003). This suggests

that the cultural aspects of telework in the French context are opaque to some degree. My perceptions, in addition to the perceptions of study participants in the CGF study, were thus affected by cultural bias. Despite this, key themes extracted from findings revealed insightful patterns which indicated how study participants perceived their experiences in the CGF telework programme.

This chapter is structured around the main findings of my study. The first part of this chapter reveals perceived advantages and disadvantages of telework for teleworkers, non-teleworking colleagues and line managers in the light of their respective role set expectations. The second part of this chapter brings together themes identified in my study findings and explores them through the lenses of role set holder dyads: teleworkers vis-à-vis non-teleworking colleagues and teleworkers vis-à-vis line managers. The second part of this chapter is structured according to the effects of telework on role set holders, job roles and the CGF. In all sections of this chapter key findings are indicated in bold italics in section and paragraph headings. In the following section I discuss the implications of telework from the perspective of teleworkers.

## **7.2 Perceived advantages and disadvantages of telework**

*The following sections reveal perceived advantages and disadvantages of telework from the perspectives of teleworkers, their non-teleworking colleagues and their line managers*

### **7.2.1. From the perspective of teleworkers**

*Teleworkers at the CGF perceive more advantages of telework than disadvantages due to role complexity*

The following summary table illustrates advantages and disadvantages identified in this study from the perspective of teleworkers.

**Table 7.1: Advantages and disadvantages of telework, from the perspective of teleworkers.**

<i>Advantages</i>	<i>Disadvantages</i>
More schedule flexibility	Less visibility
Fewer distractions	More difficult work organisation
Seen as higher status workers	More difficult communication
Increased work/life balance	More technical difficulties
Higher perceived productivity	
Greater job attractiveness	

My findings reveal that there are more advantages in the CGF sample for teleworkers than disadvantages (cf. table 7.1 above). My findings emphasise that flexibility as a means to produce telework advantages, which is argued by Hotopp (2002).

Disadvantages identified in the sample emanate from communication issues. They are linked to visual and non-visual effects of telework (identified by Spony (2003) in the French work context). Pettinger (2005) and Thuderoz (2010) argue that work relationships are regulated by interaction and presence, which maintains that when teleworkers are not as present in the office. They experience disadvantages because they cannot nourish relationships with colleagues to build networks. In addition, part-time teleworkers at the CGF experience disadvantages because they have working times outside of traditional schedules. This suggests a 'stretched hours' effect (cf. Felstead *et al.*, 2002). This also reveals that teleworkers create patterns to construct their work time (Méda, 2010; Perlow, 1999).

Beyond the role of a teleworker, teleworkers perceive themselves as a part-time teleworking colleague, a part-time office-based colleague, a part-time teleworking subordinate and a part-time office-based subordinate. Moreover, the use of role set analysis revealed that teleworkers also consider themselves, in several cases, a parent/family carer.

My findings also indicate that teleworkers hold a role which requires them to resolve technical issues at a distance, since they benefit from less technical support than office-based staff. This upholds that teleworkers' roles are more complex in the telework context. This is supported in the literature by Dupuy (2011) who claims that when work is sequential it is difficult to evaluate each worker's contribution. Moreover, my research suggests that teleworkers must manage sets of expectations in order to maintain desirable working conditions (cf. role theory (Merton, 1957)).

My findings reveal that the role expectations of teleworkers are positively altered in the telework context because they benefit from better working conditions vis-à-vis office-based workers. This can be paralleled with increased satisfaction for teleworkers due to a perceived higher status vis-à-vis their office-based colleagues. Teleworkers also claimed that key advantages of telework are experienced when they are away from the office. This was perceived despite technical difficulties which surfaced in findings. These arguments are underpinned by the assumption that teleworkers seek to retain valued benefits, such as schedule flexibility (Watson, 2008). It is also beneficial to

view how this affects the office-based counterparts of teleworkers, which is examined in the next section.

### 7.2.2 From the perspective of non-teleworking colleagues

*Non-teleworking colleagues of teleworkers at the CGF perceive more disadvantages than advantages of the telework programme because their roles are negatively altered by teleworkers*

The following summary table illustrates advantages and disadvantages identified in this study from the perspective of non-teleworking colleagues.

**Table 7.2: Advantages and disadvantages of telework, from the perspective of non-teleworking colleagues.**

<i>Advantages</i>	<i>Disadvantages</i>
More schedule flexibility	Less involvement in networks
Increased work/life balance	More difficult teamwork
Seen as higher status workers	More burdens for office-based colleagues
	More technical difficulties
	More difficult work planning

My findings indicate that non-teleworkers perceive more disadvantages than advantages of telework in the CGF telework programme (cf. table 7.2 above). Findings from non-teleworkers also feel resentment since teleworkers have benefits not offered to them. One repercussion of the telework situation is the sentiment that non-teleworkers ‘bear the burden’ when teleworkers are not available (cf. Felstead *et al.*, 2005). Findings from line managers also reveal that non-teleworkers show resentment and would like to telework. This argues that telework upsets professional relationships amongst colleagues in the French context, in part because they are based on face-to-face proximity (cf. Spony, 2003).

My findings reveal that non-teleworking colleagues hold the roles of a non-teleworking colleague of part-time teleworkers in addition to that of a non-teleworking colleague of a part-time office-based teleworker (e.g., when a teleworker is present part-time in the office). My findings also reveal that office-based colleagues have divergent expectations according to each role. Telework upsets job expectations for non-teleworking colleagues of teleworkers when telework is implemented. My research also reveals a third role, referred to as a ‘fire fighter.’ This role suggests that non-

teleworking colleagues 'bear the burden' to accomplish urgent tasks when teleworkers are not available.

Another role brought to light by findings is that of an office-based subordinate of a part-time teleworking colleague. My findings suggest that this role generates feelings of resentment and jealousy, since relations between line managers and teleworkers are altered in the telework context. My findings also advance that teleworkers are considered more privileged workers vis-à-vis office-based non-teleworking colleagues (as previously argued).

Hofstede (1980, 1991) advances that managerial traditions in the French context are affected by cultural values. In this vein, the proximity of teleworkers with line managers lowers what Hofstede defines as 'power distance' (or perceived hierarchical distance) in the case of telework. This indicates that telework affects non-teleworkers because their expectations are altered in their role sets.

My findings suggest that non-teleworkers feel that the working conditions of teleworkers are positively affected at the CGF. My research indicates that working conditions for teleworkers are improved due to increased spatial and temporal flexibility. Grint (2005) and Thuderoz (2010) maintain that worker satisfaction is affected by work and non-work. This indicates that working conditions for teleworkers are positively altered because their perceived working conditions in the office, in addition to those away from the office, are improved. Non-teleworkers in the CGF sample are disadvantaged because they do not benefit from this same spatial and temporal flexibility.

My findings indicate that teleworkers are perceived as 'privileged' workers, which is echoed by Haddon and Brynin (2005). It could be suggested that the CGF study motivates requests from non-teleworkers for greater schedule flexibility (illustrated in findings from line managers). The telework programme also upsets traditional work schedule flexibility at the CGF. This was revealed through non-teleworker replies. Non-teleworkers feel that teleworkers are disadvantaged because they are not as involved in networks. There is a need for workers to be part of networks because the social context of work is necessary to function in an organisation (cf. Méda, 2010; Watson, 2008).

Non-teleworking colleagues feel that teleworkers' expectations are inconsistent with expectations of non-teleworkers. As one example, my findings indicate that non-teleworking colleagues experience role conflict since they expect teleworkers to be available, despite teleworkers' increased spatial and temporal flexibility. This suggests that non-teleworking colleagues' roles are negatively affected in the telework context, since they experience increased undesirable effects of the telework situation. From the French perspective, Dupuy (2011) argues that the sequential nature of work is difficult to measure. When viewed in the telework context, this suggests that non-teleworking colleagues experience increased difficulties working on projects with teleworkers, when both types of workers are not available at the same times (i.e., during traditional office hours in the case of office-based workers).

Non-teleworking colleagues' roles as non-teleworking colleagues of part-time teleworkers, non-teleworking colleagues of part-time office-based workers, as 'fire fighters' and as office-based subordinates of a part-time colleague generate role conflict with roles held by teleworkers because of divergent role expectations. This suggests that telework upsets roles in the traditional French work environment because it is not a work method based on temporality (temporality in the French context as discussed by Méda (1995, 2010) and in the management context by Perlow (1999) and Linhart and Mauchamp (2010)). It is also important to examine how these issues affect line managers, which is revealed in the next section.

### **7.2.3 From the perspective of line managers**

***Line managers of teleworkers at the CGF perceive more disadvantages than advantages of the telework programme because their roles are multiplied***

The following summary table illustrates advantages and disadvantages identified in this study from the perspective of line managers.

**Table 7.3: Advantages and disadvantages of telework, from the perspective of line managers.**

<i>Advantages</i>	<i>Disadvantages</i>
More motivated workers Greater job attractiveness	More difficult to reach workers More difficult work planning More resentment from non-teleworking colleagues More difficult communication More difficult assessment

My findings reveal that telework generates more disadvantages than advantages from the perspective of line managers (cf. table 7.3 above). This suggests that there are few advantages of telework shared by teleworkers and line managers. This is due, in part, to a lack of contact between teleworkers and line managers, which is also identified by Spony (2003). Furthermore, it could be suggested that there are latent difficulties between teleworkers and line managers unidentified in this study due to its self-reporting nature (Shin *et al.*, 2000). Moreover, the stratification of the French work culture (cf. Spony, 2003; Stroobants, 2010) suggests that line managers strive to maintain their hierarchical control face-to-face, despite the implementation of telework.

My findings indicate that line managers hold several roles. First, they consider themselves line managers of part-time teleworkers in addition to line managers of office-based workers. Second, line managers experience roles as line managers of part-time teleworkers in addition to line managers of staff composed of office-based workers together with part-time office based workers (when part-time teleworkers are in the office). This suggests that line managers experience increased complexity in staff management since there is a less predictable composition of staff members in the office. This also indicates that it is difficult to manage unexpected events when teleworkers are not available (and/or all members of a team including teleworkers and non-teleworkers). Stroobants (2010) advances that managers in the French workplace emphasise their ability to organise staff. This is illustrated by the use of the word ‘cadre’ (manager) which, in the French context, refers to someone who maintains order with workers (Stroobants, 2010).

My findings reveal that teamwork is an important aspect of office management for line managers at the CGF. This suggests that line managers seek to find alternative management methods when team members are not present at the same time (such as

when teleworkers are not available at the same times as their office-based colleagues). Another role revealed in findings from line managers is the role of a conflict resolution manager. This role is generated due to difficulties in office relationships (e.g., jealousy) from non-teleworkers. It is important to explore relationships between work and non-work spheres since they affect each other (cf. Grint, 2005; Stroobants, 2010; Thuderoz, 2010; Watson, 2008). This also indicates that the telework context requires line managers to modify managerial practice in order to manage role set expectations.

The enactment of role set analysis (Merton, 1957) revealed findings which suggest that line managers' roles as part-time teleworker line managers generate role stress since telework increases their responsibilities. Moreover, when comparing the roles of line managers as part-time teleworker line managers with part-time workers (considering teleworkers are also part-time in the office) and as full-time office-based worker line managers, they experience role stress and role conflict. This is illustrated in replies from line managers which suggest that they must modify their management practice because the demands of office-based workers and teleworkers are different.

This argues that the relationships between line managers and part-time teleworkers are differentiated from those between line managers and full-time office-based workers. Relationship stratification in the French context is also affected by proximity. Dupuy (2011) and Stroobants (2010) uphold that hierarchical relationships in France are highly stratified. It could be suggested that teleworkers in the case of the CGF benefit from closer proximity with line managers, since their relationships are closer than those of office-based workers, which is echoed by Dambrin (2004). My findings reveal that these issues also affect the interaction of role set holder expectations, which is discussed in the following section.

### **7.3 Insights**

*The following sections explore the findings of my study by revealing the effects of telework on the interaction of role set holders, job roles and the CGF*

#### **7.3.1 Role set holder effects**

*Role set holder expectations (between teleworkers, their non-teleworking colleagues and their line managers) are not static*

My findings indicate that the expectations of the units of analysis (i.e., teleworkers, their non-teleworking colleagues and their line managers) in this study are not static in the



telework context of the CGF. This suggests that the expectations of teleworkers vis-à-vis their non-teleworking colleagues and teleworkers vis-à-vis their line managers interact. My research also suggests that this interaction is fuelled by the alteration of role set expectations. This suggests a process which is regulated by being and interaction, which is identified in the social context by Pettinger (2005).

***The study of role set expectations in the CGF study reveals a counter-balance effect***

My findings reveal that loads of advantages and/or disadvantages, generated by role set expectations, entail a counter-balance effect. This counter-balance effect suggests that role weight can be determined according to what role set holders perceive as acceptable sets of advantages and disadvantages. This is consistent with Merton's theory of social regularity (Merton, 1957) and role conflict theory (Grandey and Cropanzano, 1999). Moreover, this is claimed by Crozier (1963, 1971) and Thuderoz (2010) who argue that organisational contexts are made up of series of rapports amongst internal actors. However, the current literature does not consider these effects in the telework context. From a sociological perspective, Watson (2008) argues that increased flexibility in work schedules can generate changes in relationships between home and work. Furthermore, Felstead *et al.* (2002) identify telework as a means to 'reconcile' home and work.

***The counter-balance effect at the CGF is leveraged by three forces, emanating from role set holders***

Exchanges of tasks (such as work task modification in a department due to the presence of a teleworker) amongst role set holders reveal a tripartite effect. This suggests that teleworkers, non-teleworkers and line managers in this study strive to achieve a balance of advantages and/or disadvantages that allow all three role set holders to feel satisfied with their role set expectations. Telework is different from work in the traditional office environment, since it alters spatial and temporal elements of work. This reflects how the organisation of work and the interaction of actors within organisations are perceived (cf. Crozier, 1963, 1971; Grint, 2005; Thuderoz, 2010). Interaction amongst teleworkers, their colleagues and their line managers, in the telework context at the CGF, are regulated in this unique fashion.

***The counter-balance effect in the CGF sample is regulated by thresholds***

Satisfaction levels, revealed in this study through programme experiences, are regulated through the exchange of advantages and disadvantages amongst role set holders.

Exchange takes place when teleworkers modify work methods vis-à-vis line managers, or non-teleworking colleagues, in order to accommodate needs, such as providing reports as a proxy to make presence ‘felt.’ This is pointed out by Crozier (1963, 1971), Grandey and Cropanzano (1999), Mayo (1933), Merton (1957) and Thuderoz (2010) who argue that workers and managers seek mutually satisfactory work situations.

Nevertheless, satisfaction levels cannot be considered stable because this study is a cross-sectional view over a specific period of time (i.e., ten months). Moreover, study results could be biased due to the self-reporting nature of data collection (Shin *et al.*, 2000). Furthermore, it remains unclear how to measure satisfaction thresholds. Despite this, satisfaction level thresholds can be identified as the point at which an advantage becomes a disadvantage (or vice versa), from the perspective of a role set holder. It is important to explore these thresholds in the telework context because they affect organisational performance. Taskin and Bridoux (2010) claim that telework can negatively affect knowledge transfer and organisational competitiveness. Furthermore, through the identification of undesirable role set effects on role set holders, role conflict and role stress can be mitigated.

### ***Role set holders attempt to mitigate perceived disadvantages to achieve satisfaction***

It could be posited that once an advantage becomes a disadvantage for a role set holder, there is an interest to exchange factors with other role set holders to mitigate this. Factors, in this case, are represented by work tasks, responsibilities, temporal and spatial circumstances. This assumes that the exchange of factors amongst role set holders is possible, and takes place (which is suggested by study results) (cf. Crozier, 1963, 1971). Merton (1957) and Grandey and Cropanzano (1999) argue that ‘social regularity’ allows people to avoid extreme conflict. This is also consistent with arguments from Méda (2010) which claim that relationships at work are a collective activity.

One example is the effect of increased schedule flexibility. In this case, there is a theoretical satisfaction threshold at which increased schedule flexibility for teleworkers is altered from an advantage to a disadvantage due to ‘stretched’ hours. This can also be a result from excessive planning (revealed through findings from two study participants). Excessive planning underscores the importance of temporal features in the perception of work (Méda, 2010; Perlow, 1999). Findings from teleworkers also

reveal that spatial isolation is an advantage because it decreases interruptions. By contrast, it can also become a disadvantage when teleworkers feel excluded or have difficulties solving problems without the assistance of office-based colleagues. These examples suggest that advantages and disadvantages identified in this study are related and affect each other.

This also reveals that perceived advantages and disadvantages are interchangeable, depending on circumstances (cf. Crozier, 1963, 1971; Thuderoz, 2010). This interchangeable aspect is reflected in Michael Porter's (1998) approach to evaluate trade-offs (in his research on competitive strategy). Porter (1998) describes the motors behind trade-offs as 'forces.' In the case of the CGF, role set holders desire to maintain the best possible set of advantages, and accept related sets of disadvantages, to reach perceived acceptable satisfaction levels at work.

My findings are consistent with rational choice theory, attributed to Weber (Scott, 2000), which argues that people will seek working conditions that are advantageous for them. However, my research reveals that benefits experienced by teleworkers negatively alter working conditions of non-teleworking colleagues and line managers. It could also be posited that non-teleworking colleagues and line managers cannot modify their working conditions as easily as teleworkers due to their limited temporal and spatial flexibility (i.e., they are required to retain traditional working hours and physical presence at the workplace).

It is also evident that since telework practice remains in its infancy, at least in the French public administration context, it is important to shed light on the long-term effects of telework programmes on non-teleworkers. My study results reveal that although non-teleworkers and line managers perceive fewer benefits because of telework, they nevertheless perceive that it is an effective working method. This also has effects on job roles, which are discussed in the section.

### **7.3.2 Effects on job roles**

#### ***Job role perceptions are altered in the CGF telework context***

Despite shortcomings of the telework experiment at the CGF, findings indicate a desire to evaluate the telework programme and to extend it. Theoretically, however, when viewing the experience of telework at the CGF through a tripartite lens (teleworkers, non-teleworkers and line managers), it becomes clear that the implementation of

telework affects the job roles of teleworkers in addition to those of their non-teleworking colleagues and their line managers.

The existence of teleworkers in departments at the CGF upsets perceptions of advantages and disadvantages that non-teleworkers and line managers expect from their job roles. Nevertheless, it remains unclear if non-teleworkers and line managers will seek equivalent spatial and temporal flexibility over time (and request to become teleworkers, for example), or seek to mitigate the disadvantages generated by the telework situation (by exchanging responsibilities with teleworkers to create what they perceive to be a 'fair' work situation, for example, which is advanced by Crozier (1963, 1971) and Thuderoz (2010)). My findings suggest that there is resentment and jealousy in departments at the CGF where teleworkers and non-teleworkers are colleagues. This also reveals that telework alters expectations of non-teleworkers and line managers because they are forced to adjust to a new work context.

***Line managers at the CGF attempt to replace visual (face-to-face) control with proxies***

Line managers, in the case of the CGF, attempt to replace face-to-face control with other mechanisms, such as a non-face-to-face monitoring of work. Telework negatively alters the perceptions of line managers in the French context since it decreases their perception of control (cf. Hofstede (1980, 1991), Spony, (2003) and Stroobants (2010)). This suggests that the CGF telework programme upsets traditional, face-to-face management control, which is emphasised in the French cultural context (Hofstede (1980, 1991) and Spony (2003)). Furthermore, and paradoxically, my findings indicate that despite increased spatial and temporal flexibility generated by telework, line managers and their subordinates (teleworkers in this case) seek proxies to replace face-to-face control.

This has further implications in terms of how time is perceived at work: in spite of flexible work schedules for teleworkers, line managers and teleworkers at the CGF seek to replace rigid, traditional methods used to record working hours (e.g., traditional methods include the timesheet or time clock). This points out that despite the implementation of telework, study participants feel a need to rely on clearly-defined temporal measures of work (as suggested by Perlow (1999)).

### ***The high number of female teleworkers at the CGF genders roles***

In terms of gender, findings are congruent with the literature, which emphasises that family-related issues are important for females (Grandey *et al.*, 2005; Wilson and Greenhill, 2004). My findings also suggest that results are gendered due to the predominance of female teleworkers and non-teleworkers. Gender role theory (Bem, 1993) argues that the family role is more important for women than men in terms of social identity. This maintains that the orientation of work is affected by gender (Grint, 2005; Feldberg and Gledd, 1979). My findings suggest that the CGF telework programme, due to its high number of female participants, emphasises female teleworker roles.

### ***Job role expectations create friction***

My findings indicate that friction emanates in part from the burden non-teleworkers carry since they must complete urgent tasks when teleworkers are not available, which is consistent with findings from Felstead *et al.* (2005). However, from the perspective of line managers, my findings suggest that managing teams can be more difficult when teleworkers and non-teleworkers are integrated. Role set analysis brings these issues to light since it allows the exploration of expectations of teleworkers, their non-teleworking colleagues and their line managers. This extends the current literature base which lacks insight into the effects of telework on national culture.

This argues that the expectations of line managers in the French cultural context of the CGF are altered because they experience less face-to-face control (cf. Hofstede, 1980, 1991; Spony, 2003 and Stroobants, 2010). By contrast, my research suggests that managers and telework experience closer hierarchical relationships due to increased proximity from telework, such as more regular communication (e.g., phone meetings), which is identified in research in the French cultural context by Dambrin (2004). These effects also have implications for the CGF, which is discussed in the next section.

### **7.3.3 Effects on the CGF**

#### ***The CGF telework programme is perceived as a success***

Based on data collected, the CGF telework pilot programme is a success from the perspective of teleworkers. My findings suggest that there are more advantages than disadvantages of teleworking for teleworkers over the study period. By contrast, my

findings suggest that non-teleworking colleagues feel that there are more disadvantages of telework. Finally, line managers feel that disadvantages of telework outweigh advantages. Nevertheless, no findings indicated that the CGF telework programme does not merit continuation. This was perceived by all study participants: teleworkers, their non-teleworking colleagues and their line managers.

### ***Organisational issues at the CGF related to telework need to be addressed***

There are at least three caveats which affect the future of the telework programme for teleworkers. First, job prospects could be decreased, since my findings suggest that teleworkers can be disadvantaged in terms of careers and training. This indicates that teleworkers at the CGF require an evaluation of their job tasks/job design adapted to the telework context. Second, my findings reveal that teleworkers in the CGF sample could be disadvantaged in terms of their capacity to compete with other staff for interesting work (assuming that teleworkers can ‘miss out’ on projects, since they are less ‘visible’ (cf. Sidle, 2008)). Spony (2003) and Stroobants (2010) argue that managerial relationships are based on proximity in the French context. This proximity can be expressed by face-to-face contact or proxies, such as regular communication (by phone or by email, for example). Additionally, telework could, in turn, decrease teleworkers’ skill sets and the ability to remain up-to-date on the job market inside of the organisation (e.g., for internal promotion) as well as outside of the organisation (e.g., for jobs outside of the CGF).

Third, my findings suggest that female teleworkers could be more marginalised than male teleworkers. The orientation of work upholds that employment roles are affected by gender (Feldberg and Gledd, 1979; Grint, 2005). This indicates that more female workers may find telework desirable because it provides more schedule flexibility for family care, disabled person care and/or elder care at home. By contrast, in a UK context Thomson (2008) argues that since caring responsibilities are emphasised as key thrusts to promote flexible working arrangements, this can discriminate against workers who use free time for other reasons (i.e., not including caring responsibilities). Results of my study are also affected by the high number of female teleworkers and non-teleworking colleagues in the sample. This argues that telework is influenced by gender at the CGF. Finally, my findings advance that non-teleworking colleagues and, more acutely line managers, perceive more disadvantages of telework than advantages. These issues may impede the adoption of telework at the CGF.

### ***The CGF telework programme requires further assessment***

For the CGF, the success of the pilot programme depends on its ability to evaluate the telework programme. From this perspective, my study has brought to light several issues. First, findings from role sets indicate that the organisation could benefit from offering telework to more staff members. Second, disadvantages should be taken into consideration and mitigated, such as IT-related difficulties. Third, my findings reveal that it would be useful for the organisation to carry out regular assessments as the programme progresses. This could reveal other long-term effects (such as decreased knowledge transfer (cf. Taskin and Bridoux (2010))), and be used to gather more in-depth feedback from programme participants.

Fourth, my findings reveal a lack of consensus to determine optimal working times for telework participants at the CGF. This could be investigated in further studies to explore the effects of teleworkers' schedules. Lastly, the organisation could recognise the importance of the informal networks, revealed in part through this study.

Teleworkers, through their participation in this study, are one example of an informal network at the CGF.

### ***Organisations in Brittany and in other French regions can benefit from the CGF study***

Organisations similar to the CGF could benefit from this study in at least four ways. First, French-based organisations could use this study to investigate telework through role sets. Comparing and contrasting role set expectations can provide interesting insight into perceived advantages and disadvantages for teleworkers, their office-based colleagues and their line managers. Second, similar organisations could take into account the experience of the CGF to develop telework practice, such as how to manage teleworkers in teams with non-teleworkers. Third, the CGF study could be a useful exemplar for organisations located in other regions. The parameters of the CGF study can be applied and tested in other organisations based in France, such as private SMEs and multinational firms. Fourth, French-based organisations could benefit from the CGF telework study findings in terms of socio-cultural issues. One example is the effect of telework on the visual aspects of the line manager/employee relationship in the French context.

### ***HRM policy for teleworkers at the CGF remains in its infancy***

My study argues that telework can be more effectively implemented and maintained by investigating role expectations and evaluating their related advantages and disadvantages from multiple perspectives. This suggests that work relationships in a telework context are different from those in a traditional work context. Since teleworkers have a non-standard status, they require HRM policies that are different from those for non-teleworkers. It is valuable to evaluate how this affects HRM at the CGF. Recommendations for the CGF include the modification of current telework contracts in order to take into account study results (such as adapted performance management systems), the possibility of continued feedback from teleworkers (such as follow-up studies on the telework programme) and the development and recognition of informal networks (such as intranet blogs where employees can communicate and/or post comments on their experiences with telework).

My findings reveal that telework can bring added satisfaction to work life. Furthermore, the implementation of telework at the CGF can increase work/life balance perceptions for teleworkers. This advances that flexible work methods, such as telework, are work tools used to adapt to current lifestyles. This also reveals that the concept of the 'workplace' is rapidly changing. The understanding of telework is evolving within the conceptualisation of the work environment: it is no longer viewed as a benefit, but rather a means to increase possibilities to work. The next section ends this chapter and reviews the research questions of my study.

#### **7.4 Review of research questions**

***In this section I critically reflect on the research questions of my study***

**Question 1:** How does telework affect working conditions?

It was beneficial to know that the CGF carried out a pilot study on the advantages and disadvantages of telework before I started my project there. This revealed the importance that the CGF places on working conditions for its employees. After completing the study for the CGF, I feel that the working conditions for teleworkers were improved. However, this was in part to the detriment of working conditions of their non-teleworking colleagues (such as when they have to take over when a teleworking colleague is not present) and line managers (such as increased organisation of work to accommodate teleworkers). Upon reflection, this suggests that telework



affects the perceived status of teleworkers: they are considered ‘differently’ by their non-teleworking colleagues and their line managers because of their altered working conditions.

**Question 2:** How does telework affect non-teleworking colleagues?

My findings not only revealed that the working conditions of teleworkers were improved, but that this also generated a sentiment of ‘unfairness’ in the eyes of their non-teleworking colleagues. This meant that non-teleworkers experienced additional burdens, such as doing work for teleworkers when teleworkers were working away from the office. This also revealed that despite the positive effects telework generates for teleworkers, there are perverse effects on their non-teleworking colleagues. I think that my study just begins to scratch the surface of these issues. It would be useful to explore how the experiences of non-teleworking colleagues vis-à-vis teleworkers evolve over time. For example, it would be interesting to further investigate how telework affects feelings of jealousy and resentment of non-teleworkers.

**Question 3:** How does telework affect careers?

After drafting findings chapters (chapters four, five and six), I realised that there are further implications of study results in terms of careers. One observation is the large number of female teleworkers in the CGF telework programme. For example, this could put female teleworkers (who choose to telework because of their desire for increased flexibility) ‘out of touch’ with workplace networks. This could also put female teleworkers at a disadvantage (and be overlooked) for career development. This suggests that face-to-face observation is an important element in ‘being noticed’ for career progression. I am uncertain how this will evolve in the telework context in France due to cultural norms which emphasise face-to-face relationships. Nevertheless, it would be useful to follow the working lives of people who telework (especially women with caring obligations) and the people who work with them (non-teleworking colleagues and/or line managers) in the French context over time.

**Question 4:** How does telework affect work/life balance?

My findings suggest that for certain types of jobs (e.g., jobs that allow work to be done outside of the traditional workplace), telework can be an employment feature to satisfy work/life balance desires from employees. My research reveals that schedule flexibility brought by telework allows for increased time for family needs. This suggests that a

decrease in working hours (such as the implementation of a shortened, 35 hour work week in France) does not translate into greater flexibility (which can positively affect work/life balance). This is pointed out in studies by Méda and Orain (2002) which suggest that, as one example, opening hours at public crèches in France are incompatible with flexible schedules for parents. One key quote from a respondent in my study described how a child could talk about school projects to their parent. This increased perceptions of ‘happiness’ (quoted in one reply) for this same parent. This anecdote struck me. Despite the increase of communication possibilities using IT (such as cell phones, email and Skype), satisfaction in life (and affected by perceptions of work/life balance), to some degree, is still anchored in feelings exchanged during face-to-face contact.

**Question 5:** What qualities do employees feel are important to be a successful teleworker?

I did not expect to find anything surprising when investigating this research question. In fact, I felt that the qualities desired of telework were universal, because the tools used (such as IT) are widespread. Nevertheless, I was intrigued to see that the work patterns of teleworkers and their non-teleworking colleagues affected their perceptions of desirable qualities for teleworkers. After comparing and contrasting data from teleworkers and non-teleworkers, it became apparent that teleworkers developed a ‘double identity’ (I have discussed this in findings but this is the first time I am introducing this term). This suggests that teleworkers must maintain an identity as an effective teleworker in addition to an identity as an effective colleague for office-based non-teleworking colleagues. This means that teleworkers must not only develop sets of desirable qualities to be viewed as a ‘successful’ teleworker (such as completing work on time), but also must make an extra effort to ‘manage’ work relationships with office-based colleagues and be viewed as an ‘effective’ colleague (such as when teleworkers make their presence ‘felt’ through regular contact). This has effects on job roles that can be addressed by organisations in teleworker job profiles (such as in job descriptions).

**Question 6:** How do technical issues affect telework?

My findings revealed that for teleworkers, technical issues were dependent on the availability of certain IT systems (such as software and/printers). This suggests that teleworkers’ IT facilities, in many instances, were insufficient to carry out work at the

same technical level as an office-based worker. I think that there is a technological gap that needs to be filled for teleworkers. One example is the lack of access to certain software, which can be used only within the CGF structure (i.e., within offices belonging to the CGF). Another example is the requirement of teleworkers to organise work according to access to IT systems (such as being able to access certain data basis only when at the CGF headquarters in Quimper). There also may be data-related security concerns related to this. Nevertheless, this has implications on how organisations set up telework programmes with their IT departments to ensure that teleworkers are able to have sufficient technical tools to work away from the office.

**Question 7:** What effects does telework have on office management for line managers?

This research question has both practical and conceptual considerations. From a practical viewpoint, line managers in the study experienced increased burdens to manage schedules and work because they supervised two different sets of employees (teleworkers and non-teleworkers). For me, this means that line managers, especially those who have not chosen to take part in the telework programme, feel disadvantaged. On a conceptual level, study results reveal that line managers are forced to change their roles within the telework environment. Not only for the reasons evoked here (such as schedules and work organisation), but also in terms of how their role is reliant (or not) on face-to-face contact with subordinates. In a French cultural context, the decrease in face-to-face contact between line managers and their subordinates can be perceived by line managers as a loss of power (viewed through the lens of power distance, or perceived power, by Hofstede (1980, 1991)).

**Question 8:** How does telework affect productivity?

It is unclear how productivity can be better assessed in the telework environment. One problem is that productivity is traditionally assessed within the face-to-face work environment (such as units produced per increments of time that can be quantified, and are often observed). Referring to the Mayo effect (1933), it is instrumental to see how workers in the traditional work environment are affected by face-to-face observation (such as increasing productivity when workers are under observation). This has deeper repercussions in the telework environment since there is an absence of ‘peer pressure.’ I would like to explain this point with an example. When workers are in groups, there is perceived pressure to be productive, but not to ‘over produce’ because

reward, such as pay, are distributed according to the working hour. Telework upsets this when workers are no longer in constant face-to-face contact. In this vein, and despite assessment mechanisms such as through the setting and measuring of objectives, there remains a quantifiable aspect of work productivity which is incompatible with telework. If telework grows, as predicted, it is necessary to 'rethink' how to evaluate productivity at work in general (such as paying people per project instead of per working hour (which often translates into time spent being 'present')). This also has effects on the measurement of work in teams, especially when teams are composed of office-based workers in addition to teleworkers.

**Question 9:** How does telework attract candidates to work in managers' departments?

My findings, in addition to those from the literature, suggest that telework is a desirable work feature for teleworkers. Despite studies that reveal that telework can have negative effects on their non-teleworking colleagues and/or their line managers (including this study on the CGF), the general consensus is that telework is an attractive work method. After carrying out this study, I think that the central question is no longer how telework attracts candidates, but rather how the work environment can successfully integrate teleworkers. This means that workplaces need to explore how teleworkers work within teams and with line managers in order to make jobs not only attractive, but also to make telework sustainable in organisations long-term.

The following chapter discusses this study's contributions and limitations. It ends with proposals for future research and an epilogue.

## **8. Contributions, limitations and future research**

### **8.1 Contribution to the literature**

*This section elucidates four original contributions to the development of the literature base associated with teleworking*

#### ***1. My findings reveal that the investigation of telework in the French context in the current literature lacks insight into its cultural effects***

Through the lens of culture, results suggest that telework at the CGF upsets hierarchical stratification and brings into question organisational effects (manager/subordinate relationships) this work method generates. The analysis of perspectives from teleworkers in addition to their office-based colleagues and line managers at the CGF allowed these issues to emerge.

My research indicates that the cultural aspects of French management methods based on visual relationships are affected in the telework context. This reveals that teleworkers actively contribute to the alteration of French work culture because they rely more on non-visual management methods. De facto, this argues that line managers in the French context, such as those who participated in this study, modify their management approaches. In this vein, my research suggests that line managers attempt to replace face-to-face contact with non-visual methods, such as the use of regular reports to coordinate work with subordinates. Replies from line managers also suggest that they modify work organisation in teams, such as meeting schedules, to accommodate temporal constraints generated by managing teleworkers and non-teleworkers simultaneously. This reveals that line managers in the CGF study experience difficulty implementing non-face-to-face management methods.

#### ***2. Telework can be studied through a tripartite perspective***

Insights from the CGF study uphold the importance of investigating teleworker role loads from a tripartite perspective. This fills a void in the literature in the French context. Furthermore, my findings suggest that non-teleworkers and line managers in the telework situation affect the advantages and disadvantages of telework for teleworkers. This investigation thus reveals that the expectations emanating from teleworkers and actors with whom they interact (non-teleworkers and line managers in the case of the CGF) are altered in the telework context.

### ***3. My study at the CGF offers empirical evidence on the effects of organisational culture in the telework context***

My study also illustrates how telework affects the French work culture in a public administration. My findings reveal that relationships in the French public administration work environment, which emphasise hierarchy, are affected by telework because it upsets face-to-face communication. This suggests that respondents in the study have experienced changes in their work relationships because of the lack of face-to-face contact, which is an important feature of the relationship between line managers and subordinates. The current literature on telework in the French context does not consider how managers' reduced face-to-face contact affects cultural aspects of work in the French public administration.

### ***4. The CGF is a unique case of telework***

The exploration of the CGF's experience with telework contributes a case study to the literature and reveals the importance of satisfaction thresholds in the telework context. My findings emphasise the need for organisations, such as the CGF, to recognise informal networks in telework programmes. One example of an informal network is the development of workers' perceived identities as teleworkers at the CGF. The development of informal networks amongst teleworkers at the CGF was also influenced by my involvement in this study (since the study involved contacting participants). It could be suggested that this study generated a Mayo effect (Mayo, 1933) on participants: their perceived identities as teleworkers, non-teleworking colleagues of teleworkers and line managers of teleworkers were emphasised and internalised through study participation (and through my intervention because I identified them as such). The investigation of telework at the CGF also has implications for business practice, which is probed into in the following section.

## **8.2 Contribution to practice**

***This section reveals four original contributions from this study to the development of telework practice***

### ***1. My study sheds light on the effects of telework practice in the French work context***

Practice is affected by my study in at least four ways. First, my study brings to light the importance of teleworker integration in the French workplace. Despite the lack of empirical data in the current literature, especially in the French administration context,

French governmental initiatives, as illustrated in the report from the *Centre d'Analyse Stratégique* (2009), endeavour to support telework growth. Furthermore, the growth of telework in the French context is affected by cultural aspects. One example is the perception that productivity is measured based on visual (face-to-face) methods in the French context, which is maintained by Spony (2003). These issues, viewed through the lens of Hofstede (1980, 1991), are implicit. This suggests that more empirical studies, such as the one done at the CGF, can contribute to this lack of understanding for practice.

Despite this, my study also reveals that telework can be successfully implemented in the French workplace, despite several caveats. First, my findings argue that teleworkers in the CGF sample can be disadvantaged because of their teleworker status in addition to their part-time office-based worker status. This indicates that teleworkers, despite increased responsibility, attempt to retain telework as a work feature since it offers them desirable sets of benefits (revealed in my study). For practice it is important to be able to gauge the work responsibilities of teleworkers in order to maintain equity in job design in departments where teleworkers share projects with non-teleworkers. This assumes that teleworkers maintain job expectations equivalent to those of non-teleworkers (in similar jobs). Nevertheless, one argument upholds that teleworkers sacrifice desirable aspects of office-based jobs (such as access to internal networks) for increased spatial and temporal flexibility (brought by telework).

In order to mitigate undesirable effects of telework, managers can use my study to explore disadvantages of telework and related repercussions for staff. One example is the importance of providing career and training opportunities for teleworkers comparable to those offered to office-based staff. Nevertheless, career-related effects of teleworkers, due to their separation from the office, need to be studied over time to provide more depth and track change. Organisations can benefit from this knowledge to design career paths for teleworkers, their non-teleworking colleagues and their line managers.

## ***2. Telework alters expectations of non-teleworking colleagues***

My findings reveal that telework can negatively affect non-teleworking colleagues. This suggests that line managers need to consider telework's effect on information flow in teams and on work delegation. In at least one instance, my findings suggest that line

managers gave presentations to teams including teleworkers and non-teleworkers to support telework programme implementation. However, my findings suggest a lack of guidelines in terms of communication (to support effective telework programme implementation) emanating from line managers in the telework context. In a similar vein, this also indicates that telework can affect communication in teams due to its asynchronous nature (teleworkers and non-teleworkers may not be able to communicate synchronously versus office-based workers). This suggests that electronic platforms, such as internet blogs and video conferencing, can be developed to facilitate communication between teleworkers, their non-teleworking colleagues and their line managers. This also indicates that training may be beneficial to use new IT-related tools for these purposes.

### ***3. Work evaluation for teleworkers is altered in the French context***

My study reveals that line managers in the French context rely on face-to-face contact for work evaluation. This is difficult to apply to teleworkers since they are not as physically present as office-based staff. Nevertheless, the French workplace may also be changing due to the increased use of technology requiring less face-to-face contact (such as sending instantaneous electronic messages or electronic conferencing). My study reveals difficulties experienced by managers when telework is introduced in the traditional work environment. As previously discussed, my findings point out that managers attempted to use proxies, such as written reports and regular follow-up, to replace visual (face-to-face) control of workers.

### ***4. Telework affects recruitment approaches***

My findings show that telework can upset traditional approaches to recruit employees. Organisations can consider telework as a benefit to attract people who are disadvantaged because of long commutes and schedule constraints (e.g., family/carer commitments). In this aspect, telework is one desirable feature of flexible work practice. In the French context, telework programmes, such as the one at the CGF, could reduce unemployment in areas such as in the Finistère, with low population density per squared kilometre. My findings suggest that since part-time teleworkers are more satisfied, an increased number of office-based colleagues could request to participate in telework programmes. Moreover, in French regions with sparsely populated communities, telework could be implemented to alleviate long commutes.



Furthermore, telework programmes can be a work feature to attract qualified workers who live far from job locations. The experiences studied at the CGF point out that telework could be a benefit to motivate and to retain staff.

Despite its strengths, this study also has shortcomings, which are discussed in the next section.

### **8.3 Limitations**

#### *This section discusses the shortcomings of my study*

One limitation of my study is the restricted number of participants. My study was based on a pilot telework programme in its initial phase. The collection of data used a census approach using typical case sampling. Moreover, since anonymity and confidentiality for respondents was guaranteed, there was no pressure to participate. Despite this, response rates were high. Out of a total of 75 questionnaires administered (25 sent to teleworkers, 25 sent to their non-teleworking colleagues and 25 sent to their line managers), 16 teleworkers, 11 non-teleworking colleagues and 10 line managers replied, for a combined total of 37 questionnaires received out of 75, or a response rate of 49%.

My investigation of an exploratory single case study did not attempt to provide typicality, but rather insight and the identification of patterns (e.g., through the retrieval of quotes which formed themes from data). This suggests that my findings are not generalisable and can produce bias (cf. Yin, 2009). Nevertheless, the combined use of quantitative replies, based on attitude scales, and qualitative replies, based on open-ended questions, strengthened the interpretation of my results. Frequency tables provided indications of respondent replies. Qualitative data, using MUs (Giorgi, 1985, 1994) allowed me to pick up depth and discuss participant experiences. Though this exploratory case study provides arguments illustrated through participant experience, it does not attempt to provide broad generalisation.

Though respondents were given the opportunity to be interviewed (one respondent replied positively to be interviewed by phone), it is unknown if the low reply rate for interviews was due to fear of identity disclosure. My study compared experiences in a professional setting. This assumes that colleagues (teleworkers and non-teleworkers) work in a competitive context (underscored by Crozier (1963, 1971)) and that the employee/line manager relationship could be affected by the revealing of identities.

Nevertheless, more anonymous interviews could be used to gather data and reveal unknown issues (such as issues revealed in the context of conversation, during which levels of trust can be established).

It is unclear how the administration of my study affected replies. This could be due to the private nature of questions, such as those probing into teleworkers' relationships with non-teleworkers. My research suggests that there were feelings of jealousy and resentment amongst non-teleworkers because they wanted to participate in the telework programme. Moreover, it is unknown to what degree jealousy affected teleworkers and/or line managers in the sample. Furthermore, teleworkers' personal situations, such as family difficulties linked to single parenthood or elder care could have effects on the telework situation. It would be interesting to measure these influences in further studies and compare/contrast replies from several perspectives (using role set analysis (Merton, 1957), for example).

Logistical difficulties were experienced in my study. Though contact with study participants was facilitated by several entry points in the HRM department at the CGF, the questionnaire launch met several barriers. During the questionnaire launch, the telework programme at the organisation remained in a pilot phase. This meant that not all staff in the organisation were aware of my study. My intervention generated curiosity and intrigue at the organisation's headquarters. Staff were not informed of my study, with the exception of pilot telework programme participants and programme co-ordinators.

Furthermore, it was difficult to reach non-teleworking employees and line managers at the beginning of the study launch. Nevertheless, contact was facilitated by the head of HRM and the telework co-ordinators at the CGF. The lead CGF telework co-ordinator supported me by contacting all study participants, including sending email reminders. This was also supported through contact (by internal CGF email) with participants by the CGF telework programme administrator.

Fourth, although replies from female and male responses provided findings from female and male perspectives, it would be useful to integrate gender-related questions into future questionnaires. This could provide deeper interpretation of data in terms of the effects of gender in the telework context. The literature suggests that more part-time workers are women (OECD, 2003), such as part-time teleworkers. It remains unclear

what effects increased participation of women in the telework context in France produces (since employees in France benefit from generous maternity leave and stable employment contracts by law). In future studies, it would be interesting to investigate these issues by comparing and contrasting replies from female and male teleworkers.

One shortcoming of the CGF sample is gender bias (i.e., there was one male respondent in the sample of non-teleworking colleagues). By contrast, significantly more females were teleworkers and line managers. In future studies it could nevertheless be beneficial to constitute more gender-balanced samples to explore male and female experiences in telework. This could be accomplished by gathering larger data sets.

Fifth, my findings provide interesting sets of advantages and disadvantages of telework for the organisation to promote the telework programme. Budget allocation at the CGF provided funding for posts to manage the telework pilot programme (two full-time dedicated staff). There is also political will (the president of the CGF is a key thrust in the implementation of telework in the region) for telework uptake. Despite the prolongation of the telework experiment at the CGF, due to positive results, including feedback from participants in this study, it would be useful to continue to investigate telework at the organisation. Lastly, advantages and disadvantages presented in the conclusions of this study do not clearly indicate monetary and/or structural (e.g., office space cost savings, IT cost savings) effects on the organisation. As one example, it could be useful to investigate the financial effects of telework (e.g., cost savings) for the CGF. The next section suggests related research topics for the future.

#### **8.4 Future research**

##### ***This section identifies areas for future research***

Study conclusions bring to light several avenues for further research. First, it would be beneficial to investigate issues in this study, using role sets, in more than one organisation. This would provide insight using multiple cases, as observed by Yin (2009). This would also provide additional lenses through which issues could be observed at the CGF after the extension of the telework programme. This assumes that participatory organisations are dedicated to the long-term evaluation of the telework programme and that similar organisations are willing to participate in a study.

Second, it would be interesting to investigate and compare the effects of telework on home-based part-time teleworkers compared with telecentre-based part-time

teleworkers. This would provide deeper interpretation of the effects of telework in telecentres where it is assumed that there is better IT infrastructure than in private homes (e.g., reliable internet access, printers, IT helpdesks). Moreover, this could provide a means to compare differences in terms of how teleworkers experience an office environment where there is another 'set' of colleagues (assuming that telecentres have employees from other workplaces, or other part-time teleworkers). Such a study would allow the exploration of these work relationships, which can provide insight into roles perceived by participants in role sets.

Third, 'Départements' (local governments) and organisations based outside of Brittany could duplicate this study to investigate effects of telework in other contexts. The French government could use this telework pilot programme study as an example for the improvement of working conditions through its 'Aménagement du Territoire' (administration of the French territory responsible for urban planning, including the implementation of IT tools and transportation issues). My study could provide insight into potential transportation and IT effects of telework programmes in other French regions.

Fourth, it would be beneficial to carry out further studies longitudinally at the CGF. This assumes that participants would remain in employment at the organisation over a relatively long period (over one year or longer, for example). This would provide deeper understanding of the long-term effects of telework in a French administration context. In order to maintain higher response levels in questionnaire rounds, regular meetings with study participants at the CGF headquarters could also be useful.

By nature, longitudinal studies require participants to be identified in order to remain in contact with me (unless respondents are contacted and tracked through a third party to guarantee anonymity). One potential difficulty of this type of method could be the fear of disclosure of participants' identities or the release of confidential data. It is unknown if this type of approach would affect study participation at the CGF. This would also depend on the organisational context and level of trust established amongst the organisation, study participants and me.

Finally, telework studies in other organisations could be developed from this research, based on role sets, albeit with different focal points. Role set analysis could be used in similar studies with non-teleworking colleagues or line managers in pivotal roles. It is

valuable to ascertain the effects of telework from these alternative perspectives. Moreover, future research could attempt to measure related satisfaction thresholds for role set holders.

The following section ends this chapter, and study, with an epilogue.

## **8.5 Epilogue**

*In this section, written post viva voce, I reflect back on my experiences carrying out the study*

### *Insight into my initial perceptions launching the study in 2010*

I went to see managers from the CGF in July 2010, upon request from the telework co-ordinators. The meeting was formal. I had met a few of the participants (CGF telework co-ordinators, line managers, teleworkers) at my previous appointment at the office of the CGF telework co-ordinators in Quimper. The meeting in July 2010 was held at the reception centre of the CGF on the outskirts of the city. I was driven there by the head of HRM at the CGF in the car reserved for transportation by the organisation. In the car we shared perceptions of Brittany and what the CGF telework programme meant for the Bretons. The head of HRM described to me how important the Breton language and culture are for the inhabitants of the Finistère. I was shown how all street signs are bilingual, first in Breton and then in French. In the car I was also explained how the Bretons from the CGF had to go to Paris (to the central administration) to receive training before coming back to Quimper, because (as the head of HRM stated to me) that is where ‘the decision makers’ are. It started to become clearer to me that the Bretons were proud of their reputation as a hard working and focused people.

Moreover, I gained insight into the importance of the CGF telework programme’s objectives. In fact, for the staff, the meeting held July 2010 was considered a special event. There were approximately 100 people at the meeting, including the president of the Finistère, two deputies and government officials from the prime minister’s office in Paris (including one government official in charge of new technologies in the workplace). It was surprising to see that the government official from Paris was also a Breton. My overall impression was that the telework programme was a Breton-driven project.

I envisaged that the implications of my research would be small-scale, focused on the CGF. However, the mood projected by the president of the CGF during the meeting

drew my study into the national arena. It became evident at this meeting that the president intended to use the telework programme to promote the Finistère region. He spoke proudly of the Finistère and Breton cultural roots during his speech. He spoke of the progress that the Finistère had made historically and how the telework programme would make the region even more attractive for businesses and employees. In retrospect, this suggested that the implications of my findings are wider than my initial perceptions since they could be applied outside of the CGF.

At this same meeting, I was granted access to contact members of the organisation by senior management of the CGF (head of HRM, telework co-ordinators at the CGF). Later, whilst I was working on the study it became apparent that the president of the CGF could foresee a wider use of the telework experiment in the Breton context and to use the CGF telework experiment as a model, more precisely to develop charters of co-operation between the CGF and private companies. At a meeting held later in 2010 at the CGF, representatives from the French government (the French prime minister's office) and company directors from the Finistère region formalised an agreement on 2<sup>nd</sup> December 2010 in Quimper to use the CGF study as an example to promote telework in private enterprise. Though my involvement in the teleworking project may have initially seemed parochial, this action by the president gave the teleworking pilot a widened profile.

### ***My experience discussing study outcomes with the CGF in 2012***

After completing this study in winter 2012, I was contacted by the CGF to give feedback. The CGF planned a large-scale teleconference with political and industry representatives in Quimper. These representatives came from the CGF, organisations in Brittany and the central government in Paris. Since I was not able to physically go to Quimper, nor was I available at the time of the conference, an interview was carried out with two telework co-ordinators from the CGF by phone. I was surprised by the level of interest in the study from the CGF telework co-ordinators. Many of the questions discussed on the phone were framed around the research questions in my study (such as questions related to the comparison of perceptions of teleworkers, their non-teleworking colleagues and their line managers). I was also asked to give feedback on my own experiences. The first questions focused on what I feel I learnt in the study. It felt like an oral examination. Fortunately, I had a printed copy of my observations to pick up key themes and statistics to bring my answers 'to life'. I discussed in detail how the

study revealed the effects of telework on relationships in the French workplace due to the lack of face-to-face contact. One key example I explored was the sentiment of jealousy that non-teleworking colleagues claimed to experience when they had to take on work from teleworkers (who were not available face-to-face for help or advice, for example).

A key point that I discussed was the cultural effect of telework in the French context. One example is the perception of hierarchy and power distance in a non face-to-face working environment. My conversation with the CGF was a dialogue. However, the majority of the time I understood from the tone of the conversation that I was expected to provide detailed feedback. I was able to jot down notes on a piece of paper during the conversation in order to provide replies with enough examples to help make my explanations clear. I often paused to think about what I was going to say, because I also had to translate terms I had developed in the study (in English) into French. This pushed my thinking process to another dimension, since I had to develop new vocabulary (in French) to make myself understood.

One example is the notion of 'work/life balance', which in French is untranslatable into one phrase. From my knowledge of the literature on work/life balance in French, I recalled the phrase 'équilibre entre la vie professionnelle et personnelle', which is sometimes difficult to use without further explanation, since many French speakers are unfamiliar with the concept. This also revealed to me that the socio-cultural aspects of my study were fundamental to explore in order to have deeper understandings of telework in the French context. I was surprised that telework co-ordinators were very interested in having a 'non' French perspective on this. This was also interesting for me, since I was able to express the Anglo-American perspective of telework to compare and contrast with the CGF's experience. Moreover, I had to discuss the non-French perspective whilst adapting my speech to identify with French examples that telework co-ordinators could 'connect with'. One way I dealt with this during my conversation in French was to provide counter examples of practice in the UK. This allowed French speakers to have mental representations to be compared with the experiences at the CGF. I had to be cautious doing this, because many examples in the Anglo-American context were natural to me, but not to people who had never been closely involved with the English-speaking world. I had to take extra time to go deeper into detail with some examples (such as citing personal experiences) to be certain that my ideas were clear.

Speaking about the concept of power distance in French was particularly daunting. The notion of hierarchy is deeply embedded in the French culture, in part because of the formality in language. I had to explain in a formal manner (using formal forms of French since this was appropriate for me to do with the representatives from the CGF), concepts that are informal in the English-speaking world. One example I used was how the English speaking world uses the same forms of speech amongst colleagues at work and outside of work. In the French context, colleagues may use formal forms when they are together with higher positioned employees in their hierarchy, but then revert to informal French at breaks/lunch and outside of the office environment. In terms of the use of telework, this made me reflect on how telework in the French context generates a new context, which has not yet been explored in terms of cultural norms (such as the use of formal versus informal language at a distance, when there is no face-to-face contact to establish context). Examples of formality in the French context include tone of voice, standing distance, greeting with a handshake versus kisses on the cheek (which is commonplace amongst colleagues in the French context – which can add another level of distance since it can be practiced in formal and/or informal contexts). I am not sure how physical proximity in face-to-face contact could be translated into the telework environment (such as through email and communication). This made me realise that I had developed a technique using examples from the Anglo-American and French cultures (and vice-versa) to ‘bridge gaps’. This was necessary to make my points understandable and culturally relevant for the French-speaking telework co-ordinators at the CGF.

Frequently, the effect of telework on the perception of ‘power’ in hierarchical relationships came up in the conversation. This was, however, difficult to discuss at certain points because I was working within a formal French context with the telework co-ordinators at the CGF. In fact, we spoke formal forms of French and were, in effect, operating within a hierarchical context (I was an ‘outsider’ and the telework co-ordinator an ‘insider’ at the organisation). Thus, our discussions could have had more depth, if we had been in a ‘closer’ context. This evokes the ‘insider/outsider’ (Dwyer and Buckle, 2009) concept. I shall discuss this in greater detail in the next part of this section. I am pleased to say that during the phone interview the CGF informed me that the telework programme was growing (they have since doubled the number of part-time telework participants from 25 to 50 and intend to grow even more). It was also satisfying to know that my study was a useful tool for the organisation to investigate the



programme in place. At the end of the phone interview I indicated that I would be available for any other follow-up. I felt that I had developed the beginning of a cordial, professional relationship with the telework co-ordinators at the CGF.

### *Other cultural perceptions on my conversations with the CGF*

I later reflected on comments from the phone interview with the CGF, linking my thoughts with key writers on national culture. Some observations I had during and after the phone interview included the presence of power distance (Hofstede, 1980) and hierarchy (cf. Hofstede, 1980, Spony, 2003). First, power distance is part of the French working culture. It is because of history (since the French language, and its hierarchical aspects, was cultivated by the aristocracy before the French revolution in 1789) in addition to employee practice in labour relations the later part of the 20<sup>th</sup> century. A key contribution was the establishment of employment categories in 1954 for the labour code, which are applicable today (these categories distinguish hierarchical levels of employees). I found it surprising that the organisation attempted to transmit this into the telework programme.

The CGF telework programme had a formal ‘hierarchy’ delineating who was responsible for whom. This illustrates that despite the initiative to develop a more flexible working culture, there was a cultural need for a hierarchical structure. For example, instead of letting workers have freedom to choose their schedules, line managers held veto power to instruct them to change schedules when necessary. I do not know if this is considered a ‘teething pain’ as part of the adaptation to a non face-to-face working culture (inherent to telework), friction to change, or simply a manifestation of a deeply ingrained cultural norm. This has further implications in terms of the general perception of hierarchy in the French work culture, and more specifically at the CGF, which is my next point.

The CGF, despite the introduction of telework, which suggests an emphasis on a remote work culture, held on to a deep-rooted sense of hierarchical positions within the organisation. For example, the president of the region, along with his deputies, are given high degrees of respect in the way they are addressed in French (e.g., the president is addressed as ‘Monsieur le Président’) and using formal French language (including ‘vous’ in addition to a particular protocol in speaking with high level people, such as using the inverted form of verbs, e.g., ‘voulez-vous Monsieur le Président’

instead of 'vous voulez'). It seemed to me that the CGF, despite the telework initiative, wanted to hold on to the protocol and traditions that had been created and reinforced in a face-to-face work culture. This reveals that telework caused an organisational culture shock. This also suggests that it was uncomfortable for workers to adapt to the new telework environment, which co-existed within the traditional face-to-face work culture of the CGF.

Schein (2010) claims that understanding the perception of authority is key to understanding a culture. Schein also argues that authority is central, along with intimacy, to understanding culture. He argues that in most organisations power is attributed to some form of 'pecking order.' In the CGF, this was also true. However, it was interesting to see that the implementation of the telework programme brought aspects of power distance (Hofstede, 1980) and hierarchy (Spony, 2003) in the organisation into sharper relief. Not only were these issues elucidated to me as someone investigating telework, but they also became evident through the behaviour of study participants (such as when line managers introduced follow-up reports as a means to follow the work of subordinates they could not observe face-to-face).

### ***Linkages to the socio-cultural perceptions of the Bretons***

Whilst doing this research, I perceived cultural tension between the government officials in Brittany, including those at the CGF, and the French government in Paris. The telework programme is the first initiative of its kind in a French public administration. The president of the region would like the project to be an example of innovation in the Finistère not only to all of Brittany, but also to the French Republic. It was also important for me to understand Brittany's, and more specifically, the Finistère's Celtic roots. The region is bilingual to a degree (there are school programmes in place which promote Breton and French and all street signs are bilingual). Historically, the Finistère was a rural area where people farmed the land and went to Paris to seek work. Until the mid 20th century, the Breton language and culture were not allowed to be expressed in the public administration or schools. Though the French Republic has not officially recognised the language and culture of Brittany, there is a desire in the region to show the Bretons' strength as a cultural minority, as previously discussed. The CGF programme is a means to project the Breton culture to other regions and to the central government in Paris. My research therefore contributes

to the profile of Finistère as an important actor in the French administrative and political landscape.

### ***Cultural reflections on my position as an 'insider/outsider' during the study***

After completing the study and going through the viva voca, I reflected upon the concept of 'insider/outsider' (Dwyer and Buckle, 2009) and how it linked to my role as a researcher at the CGF. Throughout the study, I was aware of my presence at the organisation as a 'French' (in addition to an 'Anglo-American') researcher.

Nevertheless, upon reflection, it became more and more apparent that there was an 'in between' space between those two roles. This 'hyphen' as it is called by Dwyer and Buckle (2009) is what I would like to discuss in more detail in this section.

Dwyer and Buckle (2009) describe this 'hyphen' as a 'dwelling place' that holds ambiguity and even paradox. This 'dwelling place' is an area where my French culture and my Anglo-American culture (I was born in the US but was educated abroad in the American and British traditions). Dwyer and Buckle refer to this as a 'space' where ambiguity exists. In my case, it felt like a place where I could comfortably 'shift' between the French and the Anglo-American cultures. My Anglo-American and French cultures came together in ways that were opaque to me at first. I became more aware of this space and how to navigate within it, as the study advanced. Whilst piecing together the findings chapters, this became especially clear, since I needed to interpret data from replies not only from a language perspective (such as when working with translations), but more importantly from a French cultural viewpoint. This required me to 'read between the lines'. One example was to take examples from study participants that involved context, such as when one teleworker described how 'decisions are made in the café'. Since the café is an important socio-cultural place for people in the French context, many professionally-related decisions are made there. This aspect was also a culturally enriching experience for me to explore as a researcher.

One example was when I translated the qualitative data from respondents from French into English. Sometimes I would become so involved in the French, that I had difficulty thinking in English. Also, given the context of the study and the roles of study participants, I attempted to put myself in their positions and translate the meaning of their written expression into English. Sometimes it was difficult to do because idiomatic expressions are hard to find equivalents for in English when they do not exist

in the culture. One example was the translation from the French 'c'est le bonheur' into the English 'that is happiness' (which is not idiomatic in English). Moreover, sometimes it was mentally exhausting going back and forth between French and English. I feel that this made me more deeply aware of the 'insider/outsider' concept.

One interesting anecdote was at the end of one work session during the day translating into English. In the evening I wanted to retreat to French and read and speak only in French. I felt tired of English. The opposite happened when I translated from the English into the French (when translating questionnaires for example). Undertaking this study forced me to think deeply in English and French simultaneously. I had to refer to the dictionary to look up words in either French or in English after translation, because my thinking became bilingual. Another example of cultural effects I experienced was my internalisation of French working culture when interpreting study results. I needed to be able to 'stand back' and attempt to think as a person not familiar with French culture. This forced me to attempt to operate as an 'outsider' in terms of my bilingual/bicultural identity. It took me several rewrites, in addition to deep discussions with my supervisors, to bring this dilemma to light. The insider/outsider idea allowed me to conceptualise my reflections.

### ***Linkages between my previous experience with the French administration and my study at the CGF***

I compared my experiences with the CGF employees with my own previous experience working in the French national administration. I have held posts with an international organisation in Paris and was a 'liaison officer' between the organisation and the French foreign office in Paris. Again, my job role as an 'insider/outsider' at that time had become internalised (I was working with the French in a French context and with the international organisation for the most part in an Anglo-American context). It was surprising for me to see that when I entered the CGF in Quimper, July 2010, I was able to 'connect' with their work culture since I had been exposed to it and had worked in it. This is echoed in the work done by Gair (2012) who describes shared experiences between the researcher and those who are studied can contribute to the 'insider/outsider' status. Moreover, Hanrahan, Cooper and Burroughs-Lange (1999) and Mills (2000) underscore the importance of life experience in the learning process. Nevertheless, it took time for me to understand the importance of the role of culture in the telework programme. My study was one instrument that brought this to light.

### ***Reflections on my methodological choices***

Thinking back, if I had a free hand, I would have spent time carrying out in-depth interviews with study participants to gain more insight. However, I chose to work within the constraints of the access that was granted to me by the CGF (one participant agreed to be interviewed). From a cultural perspective, I do not know if I would need to spend much more time with people before they would accept to be interviewed by an ‘outsider’ (and also since face-to-face contact is important in the French context). Again, this comes back to my thoughts on the role of being a non-member of the organisation, and as an ‘insider/outsider.’ Nevertheless, it has become more apparent to me after the viva voce that I should not underestimate the role of culture and more specifically, its opaque aspects. Even as someone who can slip into the role of a person embedded in French culture, I had to work within the constraints of being an ‘insider/outsider’ in terms of a bilingual/bicultural researcher at the CGF. As stated previously, this has its advantages and disadvantages, but also brings richness to the understanding of issues within this ‘dwelling place’ as pointed out by Dwyer and Buckle (2009).

### ***Authors who nourished the conceptual aspects of my study***

The reflections in this section are, in part, the product of thinking after the study was completed. They have been nourished and shaped by the work of many authors, considered to be ‘futurists’ in terms of the evolution of the work place and its conceptualisation. Among them are Gratton (2011), Ibarra (2004), Pink (2011), Méda (2010), Pinçon and Pinçon-Charlot (2007), Schein (2010) and Viard (2011).

Gratton’s (2011) discussions on the virtual work environment of the future made me think of how telework will affect the relationships of people at work when people no longer interact face-to-face. Ibarra (2004), in her book *Working Identity*, explores the experiences of people who change careers. I was inspired by her approach using the experiences of people in quoted text to bring depth to discussions. When I read her book I was intrigued by the richness of the stories told and how they formed the conceptual framework in her study (study from which her book is derived). In another vein, Pink (2011) offers interesting insight into the more innovative ways of motivating people, which emphasises intrinsic rewards. This also reveals why people who

telework have more meaningful work experiences, since they can benefit from more balanced non-work lives.

From another perspective, Méda (2010) has carried out influential studies on the role of work in French life. Her insight, especially in terms of her views of the 35 hour work week and its emphasis on counting time instead of using other means to measure productivity (such as output), has helped me understand how telework affects temporal views of productivity. Pinçon and Pinçon-Charlot (2007) have carried out interpretive studies on French social roles, such their work on the French perspective of social stratification called *Les Ghettos du Gotha* in which they explore the experiences of how people view social class in France. Their studies have influenced my thinking in terms of how I view the evolution of French hierarchy (such as the perception of power distance). This is especially beneficial to apply to the telework environment in France, which upsets face-to-face culture. This assumes that face-to-face contact allows visible stratification, such as body language and cultural norms related to behaviour.

From another perspective, Schein (2010) is a scholar who can express complex concepts, such as the role of organisational culture, in simple terms. Moreover, his thinking has influenced my interpretation of the conceptual boundaries of my own work in this study in terms of the roles of organisational culture and national culture in the telework context. Finally, Viard's (2011) work as a futurist of the French workplace has contributed to my reflections on French workers' perceptions of work and non-work life. This is not only insightful to me as a French-cultured person, but also provides useful statistics, such as those which suggest that French workers desire increased levels of well-being outside of urban centres. His work also elucidates the need for more flexible working arrangements in France, such as telework. These authors have not only formed my perspective of the workplace, and more especially the workplace in France, but have also influenced my interpretation of study results.

### ***How I perceive the conceptual aspects of findings post study***

After I finished drafting the thesis for submission, these reflections emerged through my mental 'sorting' of what the results meant and how they were linked to the 'bigger picture.' This required a lot of mental 'juggling,' going back and forth between the study results and the conceptual framework, introduced at the beginning of this study. The reflections in this section are also the fruit of discussion with my supervisors and

colleagues (at my employer, a Swiss university of applied sciences) who gave me helpful feedback and were a useful ‘sounding board.’ This brought key themes in this section into sharper focus for me.

After the study, I began to think more on a conceptual basis, leaving the details behind and trying to understand what the study meant for the future. It also became clear that the conceptual boundaries of the study had much broader implications than initially projected. In fact, I felt the territory investigated by this study was being ‘stretched.’ As I reflected on the socio-cultural aspects of this study, it became more and more evident that the concept of work in France is being transformed by the use of new technology in the workplace, such as through the implementation of telework. Since the French culture emphasises face-to-face contact, the perceptions of work, time, work relationships and managerial aspects of work (explored in the conceptual boundaries of this study) are more opaque in the telework context. I feel that these perceptions are more difficult to explore in a context (such as in the telework context) where there is decreased face-to-face contact.

In terms of the work environment it is interesting to see how telework fits into the French perception of work-life versus non-work life. Again, Viard (2011) claims that there is a greater crossover of work and non-work because of flexible working methods. He also argues that the development of the TGV (Train à Grande Vitesse) has reversed the traditional rural exodus (traditionally Paris is the centre of activity for France). This means that workers can now commute easily to and from the capital (for example Marseilles is three hours by TGV from Paris). He claims that more than 75% of French residents want to live outside of urban centres with more space. Telework is one work method that fits into this scenario.

As previously discussed, Gratton (2011) claims that thanks to new technology in the future, such as visual imaging (seeing colleagues and discussing via video in three dimensions) the workplace will become virtual and international. This has implications for telework, which according to Gratton, will become the norm. Nevertheless, it is unclear how this would affect work-related culture. This will affect how workers will perceive organisational culture (cf. Schein, 2010) and national culture (cf. Hofstede, 1980). It is unclear how these will evolve within a virtual work environment. For example, will new technology in the workplace influence a new type of organisational culture and perhaps even a ‘virtual’ culture based on the cultural norms of those

countries/groups who promote it? These questions remain unresolved and require further research.

It is evident from the results of my study that the concept of time in the workplace is affected by the introduction of telework. Nevertheless, it is unclear if traditional timekeeping systems (such as the watch or timeclock) will disappear. This has repercussions for labour law (such as pay per hour) and employee protection (such as employer insurance for workers based on physical presence at the workplace). As telework grows, there will be changes in how time is viewed at work and outside of work. This also means that the concept of the 'workplace' versus 'private space,' such as the home, could become even further blurred.

Study results also made me think about the effects of telework on relationships. The concept of 'colleague' and 'friend' could also become ambiguous, since relationships in the telework environment are no longer defined by context (e.g., a colleague is a colleague because we see that person for the most part at work). Therefore, telework has much deeper implications in terms of how we view the people with whom we work. This also affects the cultural norms that are explicit in face-to-face culture (such as the use of formal French language and physical stance between subordinates and line managers (cf. Stroobants, 2010)), which can become implicit in a virtual culture (such as when using non face-to-face technology to communicate). Again, it is difficult to say if there will be cultural resistance to change for those involved with telework or if the growth of telework will modify cultural behaviour over time.

### *How I perceive my learning*

After writing the previous reflections, my learning from the DBA has become clearer. I feel that I need to take more time to carefully consider choices before jumping to conclusions. In the study this became evident when I had to think about the cultural context of the CGF, including hierarchical perceptions, when interpreting findings. This was illustrated when I had to think about why teleworkers hesitated revealing negative aspects of their work situation. By reflecting on the cultural implications of this, I came to realise that power distance was one important factor. This has also influenced how I interpret situations in academic contexts (such as when doing studies in other cultures/countries) and professional contexts (such as when I work in international teams). I feel that I am now more curious to go deeper into what I



observe. Doing this study has allowed me to use tools, such as role set analysis, to compare and contrast experiences of people at work. This is a technique I can use to go deeper into the interpretations of workers' perceptions in future studies. In a similar vein, after doing this study I feel that I am prepared to execute independent research on telework in other organisations. A great deal of completing this study involved 'trial and error' whilst trying out different techniques (such as when I had to work in French at the CGF and then translate cultural concepts into English). In terms of my investigation at the CGF, I believe that the experience of doing this study and completing the DBA have allowed me to 'step back' and find connections between the effects of telework and the people who choose to adopt it.

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## **Appendices**

## **Appendix 1: Authorisation for study – English (translated from the French)**

Hello Mr. Lewis,

Following our telephone conversation, I confirm that we are delighted to invite you to the Conseil Général du Finistère on Thursday 1 and Friday 2 July in conjunction with our telework pilot experiment.

We are pleased to welcome you on Thursday 1 July in the beginning of the afternoon for a meeting to discuss your mission with (name of manager), deputy director of human resources and director of the telework project, (name of manager) telework project manager (name of manager) and myself.

At 4.30 p.m. there is a meeting planned with the teleworkers and their line managers. The President of the Conseil Général and (name of government official), Conseiller Général, in charge of development of the infrastructure and use of numerical tools.

On Friday 2 July, you will be able to meet teleworkers, their line managers and non-teleworkers, either by telephone or in person, who have been solicited, to discuss their perception of telework.

Please find below our contact details:

Conseil Général du Finistère  
32, boulevard Dupleix  
29000 Quimper

Please go to the reception, which will inform us of your arrival. If you would like us to come to pick you up at the aeroport or the train station, do not hesitate letting us know.

We remain at your disposal and look forward to seeing you soon.

Best wishes,

(name of manager) and (name of manager)

Conseil Général du Finistère

## **Appendix 2: Authorisation for study – French (original)**

(re) Bonjour Monsieur Lewis,

Suite à notre échange téléphonique, je vous confirme que nous vous recevrons avec plaisir au Conseil Général du Finistère le jeudi 1er et vendredi 2 juillet dans le cadre de notre expérimentation Télétravail.

Nous vous accueillerons le jeudi 1er juillet en début d'après-midi à votre arrivée pour un premier échange sur votre mission en présence de (name of manager) Directrice générale Adjointe Ressources et Directrice du projet, (name of manager) et moi-même.

A 16h30 est prévue la rencontre avec les expérimentateurs télétravailleurs et leurs encadrants. Cette rencontre aura lieu en présence du Président du Conseil général et de (name of government official) Conseiller général en charge du développement des infrastructures et usages du numérique.

Pour la journée du 2 juillet, rencontre téléphonique ou physique avec des télétravailleurs, encadrants et non-télétravailleurs qui ont été sollicité pour échanger avec vous sur leur perception du télétravail.

Voici les coordonnées précises du Conseil général :

Conseil général du Finistère  
32 boulevard Dupleix  
29000 QUIMPER

Merci de vous présenter à l'accueil qui nous informera de votre arrivée. Si vous souhaitez que l'on vienne vous chercher à la gare ou à l'aéroport, n'hésitez pas à nous en informer.

Restant à votre disposition et à bientôt.

Cordialement

(name of manager) et (name of manager)

Conseil général du Finistère



**Appendix 3: Letter to study participants – English (translated from the French)**

SUBJECT: QUESTIONNAIRE ON TELEWORK

Dear Participant,

Your organisation has kindly agreed that I can approach you to seek your participation and they are supporting my research. The questionnaire should only take you approximately 20 minutes to complete.

All data will be kept strictly confidential and individuals will not be identifiable, nor will people be named in the thesis. The study is purely for academic research.

The purpose of the questionnaire is for me to evaluate the experiences of teleworkers and compare them with those of non-teleworkers and line managers. Again, I must emphasise that all the information given to me by participants is entirely confidential and will not be revealed to anyone.

Thank you very much in advance for your time. I remain at your disposal for any questions you may have.

Robert Lewis

Les Sapins Argentés 1  
Route de Vermala 49  
CH-3963 Crans-Montana, VS  
Switzerland  
00 41 79 505 55 16  
ralewis@gmail.com

#### **Appendix 4: Letter to study participants – French (original)**

OBJET : QUESTIONNAIRE SUR LE TELETRAVAIL

Cher participant,

Je serais ravi si vous pouviez m'accorder un peu de temps et remplir le questionnaire ci-joint afin de réaliser une étude sur le télétravail.

Votre organisme, qui soutient pleinement ce projet, m'a permis de vous contacter. Ce questionnaire, anonyme, devrait prendre environ 20 minutes à remplir.

Tout le contenu du questionnaire reste anonyme et strictement confidentiel. Les individus ne seront pas identifiables. Cette étude a pour but d'évaluer les expériences des télétravailleurs et les personnes avec qui ils travaillent.

Merci de votre temps. Je reste à votre entière disposition pour tout renseignement utile.

Robert Lewis

Les Sapins Argentés 1  
Route de Vermala 49  
CH-3963 Crans-Montana, VS  
Suisse  
00 41 79 505 55 16  
ralewis@gmail.com

## Appendix 5: Questionnaire to teleworkers – English (original)

QUESTIONNAIRE – TELEWORKERS	
CONFIDENTIAL QUESTIONNAIRE	
<p><b>Definitions of terms:</b> Teleworker: <i>any home-based telework programme participant</i> Non-teleworking colleague: <i>any home-based telework programme participant colleague working in a similar post who is working full-time and is office-based.</i> Line manager/manager: <i>any line manager who currently supervises a home-based telework programme participant.</i></p> <p><b>All data will be kept strictly confidential. Individuals will not be identified nor will people be named in the study. The study is purely for purposes of academic research.</b></p> <p>Please answer all the questions by:</p> <ul style="list-style-type: none"><li>• putting a tick in box, like this ..... <input checked="" type="checkbox"/></li><li>• or by writing in a number, like this..... 12</li><li>• or by providing details which can be put on the back of the questionnaire if necessary</li></ul>	
EMPLOYMENT	
<b>1. Job position :</b> .....	
<b>2. What are your educational/professional qualifications? (please tick all that apply):</b>	
Degree level or above .....	<input type="checkbox"/>
Secondary school (BAC level) .....	<input type="checkbox"/>
<b>3. Where do you currently work? Please specify:</b>	
Directorate .....	
(write full name) .....	
Section .....	
(write full name) .....	
Location .....	
(write address) .....	
<b>4. How long have you worked at your organisation?</b>	
Please write in number of years and months	
..... years .....	months
<b>5. How long have you worked in your current post?</b>	
..... years .....	months
<b>6. How long have you been teleworking in your current post?</b>	
..... years .....	months
<b>7. What is your current status?</b>	
Permanent staff.....	
Non-permanent staff (please specify type).....	
PATTERNS OF WORK	
<b>8. Is your current post full-time or part-time?</b> (Please tick ONE box and enter the number of hours for part-time)	

Full-time .....   
 Part-time .....   
 Total number of contracted hours per week : .....  hours

**9. How many hours a week, on average, do you telework from home?**  
 Please write in .....  hours

**10. Do you telework at any other location than your home?**  
 Where : .....  
 How many hours per week per location : .....  
 How many hours per month per location : .....

**11. Do you have to agree a fixed pattern of work with your manager or can you work the hours you want ?**  
 .....  
 .....  
 .....

**12. If you want to alter your pattern of work, will your line manager usually agree?**  
 Always .....   
 Usually .....   
 Sometimes .....   
 Never .....

**13. Do you often work extra hours? If yes, how often and when?**  
 Per week (on average) .....   
 Per month (on average) .....   
 When (eg evenings, weekends, holidays).....  
 .....  
 .....  
 .....

**14. Are you under pressure to work extra hours in your current position?**  
 Yes .....   
 Why ?.....  
 .....  
 No .....

**PROGRAMME EXPERIENCES**

**15. Why did you choose to take part in the telework programme study?**  
 .....  
 .....  
 .....  
 .....  
 .....

**16. Taking everything into account, has the telework programme met your expectations?**  
 Yes .....   
 No .....   
**If yes, How?** .....  
 .....  
 .....  
 .....

<b>PARTICIPANT PROFILE</b>					
<b>17. What is your age ?</b>					
.....					<input type="checkbox"/> <input type="checkbox"/>
<b>18. What is your gender (tick one)</b>					
Female .....					<input type="checkbox"/>
Male .....					<input type="checkbox"/>
<b>19. How long does it typically take to commute from your home to your workplace when not teleworking?</b>					
(morning) Minutes .....					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
(evening) Minutes .....					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>20. How do you usually commute (eg public transportation) when not teleworking?</b>					
Bus .....					<input type="checkbox"/>
Train .....					<input type="checkbox"/>
Car .....					<input type="checkbox"/>
Motorbike .....					<input type="checkbox"/>
Bicycle .....					<input type="checkbox"/>
Walk .....					<input type="checkbox"/>
Other (specify) .....					<input type="checkbox"/>
<b>21. Do you have a dedicated work space at home?</b>					
A whole room .....					<input type="checkbox"/>
Part of a room .....					<input type="checkbox"/>
<b>If so, does it fulfil your needs? If not, why?</b>					
.....					
.....					
.....					
.....					
<b>22. Experience with teleworking. Please indicate how far you agree with the following statements:</b>					
<b>PLEASE TICK ONE BOX IN EACH LINE</b>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
For certain tasks, I need to see my non-teleworking colleagues in person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can reach my non-teleworking colleagues with ease by phone or e-mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My non-teleworking colleagues and I communicate well on most issues by phone or email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meetings schedules need to take into account when I Telework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I am often viewed as not committed to my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have the same level of job responsibility compared to a person in a similar job who is office-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am treated the same as non-teleworking colleagues in meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is difficult for my non-teleworking colleagues to resolve urgent issues					

when I am not in the office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is harder for me to sort out problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is harder to keep up to date with new developments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is harder to find out what is going on in the department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am consulted less on matters of importance to me since becoming a teleworker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My manager gives me less challenging tasks since I have become a teleworker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**23. What differences do you feel there are between teleworkers and office-based workers?**

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**24. Teleworkers compared to non-teleworkers : advantages of teleworking. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I have less stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel more in control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I experience fewer health-related problems due to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have fewer interruptions at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**25. What are the main advantages of teleworking? Can you give examples?**

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**What are the main disadvantages? Can you give examples?**

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**26. Disadvantages of teleworking. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
My career opportunities are comparable to those of non-teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I receive the same training opportunities as office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My working conditions (eg lighting, heating, space) are comparable to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I receive comparable pay to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can generally experience more isolation than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I miss out on the social aspects of work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. Telework and flexible schedules/work-life balance. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I have more flexibility in arranging non-work related schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have more flexibility in arranging work related schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can accommodate family responsibilities more easily than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can manage time more effectively than non-teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work spills over into my personal life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is more difficult to cut off from personal worries at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**28. How does telework impact work flexibility and work/life balance?**

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**29. Personal characteristics of teleworkers. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Require high levels of motivation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to be able to work alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Require tenacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to be organised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to solve problems independently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need technological literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Have a trusting relationship with line managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have trusting relationships with peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to manage tendencies to overwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to manage distractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need good communication skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**30. What personal characteristics are important for you as a teleworker?**

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**31. Technical issues. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I depend more on reliable internet access than than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can resolve technical questions (related to IT software) at a distance in a comparable manner to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**32. What technical issues affect telework?**

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**33. Advantages of managing teleworkers. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telework is cost-saving for the Directorate Budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers use less office space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers take less sick-leave than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework allows managers to assign projects outside of traditional office-based hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework allows managers to avoid personnel conflicts in the office (eg separating employees)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework allows managers to effectively manage office space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**34. What are the advantages of managing teleworkers from your perspective?**



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**35. Disadvantages of managing teleworkers. Please indicate the extent to which you agree or disagree with the following statements :**

<i><b>PLEASE TICK ONE BOX IN EACH LINE</b></i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telework interrupts projects for my line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are more difficulties managing teleworkers due to less visual contact versus office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is more difficult to supervise teleworkers than office-based teleworkers for my line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is less personal communication with teleworkers versus office-based workers for my line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworker performance is difficult to manage versus office-based workers for my line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework means less motivated staff for my Line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework means difficulty in organising work for my Line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**36. What are the disadvantages of managing teleworkers from your perspective?**

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**37. Telework and productivity. Please indicate the extent to which you agree or disagree with the following statements :**

<i><b>PLEASE TICK ONE BOX IN EACH LINE</b></i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telework means higher levels of productivity for teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework allows to more closely measure my performance for my line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**38. What impact does telework have on individual productivity from your perspective?**

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**39. The ability to attract and retain workers. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telework programmes attract high-calibre candidates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes attract candidates who live outside of your region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes are seen as an advantage to workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes allow the organisation to compete with other employers to offer similar benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**40. Has telework affected your likelihood of staying at your organisation?**

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*Many thanks for your participation.*

*Please return the questionnaire in the envelope provided to:*  
**R.A. Lewis**  
**Les Sapins Argentés 1**  
**Route de Vermala 49**  
**CH-3963 Crans-Montana, VS**  
**Switzerland**

*Or by email to:*  
[ralewis@gmail.com](mailto:ralewis@gmail.com)

## Appendix 6: Questionnaire to teleworkers – French (translated from the English)

QUESTIONNAIRE – TELETRAVAILLEURS	
QUESTIONNAIRE CONFIDENTIEL	
<b>Définitions:</b> Télétravailleur: <i>participant qui travaille depuis son domicile.</i> Collègue non-télétravailleur: <i>participant qui travaille avec un télétravailleur et qui occupe son poste à plein-temps.</i> Supérieur: <i>participant qui supervise un télétravailleur.</i>	
<b>Toutes les données sont strictement confidentielles. Les participants à cette étude ne seront pas identifiables. Cette étude est purement pour la recherche académique.</b>	
Veuillez répondre à toutes les questions comme ceci:	
<ul style="list-style-type: none"><li>• Cocher une case ..... <input checked="" type="checkbox"/></li><li>• Ou par mettre un chiffre..... 12</li><li>• Ou par donner des détails par écrit, au verso du questionnaire aussi, si nécessaire.</li></ul>	
EMPLOI	
1. Poste : .....	
2. Quelles sont vos qualifications? (cocher tout ce qui s'y applique):	
Etudes supérieures .....	<input type="checkbox"/>
Etudes secondaires (niveau Bac) .....	<input type="checkbox"/>
3. Ou travaillez-vous?:	
Département .....	
.....	
Service .....	
.....	
Ville .....	
(adresse) .....	
.....	
4. Depuis quand travaillez-vous à votre organisme?	
En années/mois:	
..... années .....	mois
5. Depuis quand travaillez-vous dans votre poste actuel?	
..... années .....	mois
6. Depuis quand pratiquez-vous le télétravail dans votre poste actuel?	
..... années .....	mois
7. Quel est votre statut actuel?	
CDI.....	
CDD ou autre (veuillez préciser).....	
HORAIRES	
8. Votre poste est-il à plein-temps ou à temps-partiel? (Veuillez cocher une case et mettre le nombre d'heures par semaine)	

Plein-temps .....	<input type="checkbox"/>
Temps-partiel .....	<input type="checkbox"/>
Nombre total d'heures travaillées par semaine : .....	<input type="checkbox"/> <input type="checkbox"/> heures
<b>9. Combien d'heures par semaine, en moyenne, pratiquez-vous le télétravail à domicile?</b>	
Veuillez préciser le nombre en .....	
<input type="checkbox"/> <input type="checkbox"/> heures	
<b>10. Pratiquez-vous le télétravail ailleurs qu'à votre domicile?</b>	
Où : .....	
Combien d'heures par semaine et par endroit? :	
.....	
Combien d'heures par mois et par endroit? :	
.....	
<b>11. Avez-vous des horaires réguliers, en accord avec votre supérieur ou avez-vous des horaires que vous souhaitez?</b>	
.....	
.....	
.....	
<b>12. Si vous voulez modifier vos horaires, votre supérieur est-il d'accord?</b>	
Toujours .....	<input type="checkbox"/>
Souvent .....	<input type="checkbox"/>
Des fois .....	<input type="checkbox"/>
Jamais .....	<input type="checkbox"/>
<b>13. Travaillez-vous des heures supplémentaires? Si oui, quand?</b>	
Par semaine (en moyenne) .....	<input type="checkbox"/>
Par mois (en moyenne) .....	<input type="checkbox"/>
Quand (par exemple soirées, weekends, vacances) .....	
.....	
.....	
.....	
<b>14. Subissez-vous de la pression pour travailler des heures supplémentaires dans votre poste?</b>	
Oui .....	<input type="checkbox"/>
Pourquoi? .....	
.....	
Non .....	<input type="checkbox"/>
<b>EXPERIENCES</b>	
<b>15. Pourquoi avez-vous choisi de participer au programme de télétravail?</b>	
.....	
.....	
.....	
.....	
.....	
<b>16. Tout pris en compte, le programme de télétravail a-t-il rempli vos attentes?</b>	
Oui .....	<input type="checkbox"/>
Non .....	<input type="checkbox"/>
<b>Si oui, comment?</b>	
.....	
.....	

<p>.....</p> <p>.....</p> <p>.....</p>																																			
PROFIL																																			
<p><b>17. Quel est votre âge ?</b></p> <p>..... <input type="checkbox"/><input type="checkbox"/></p>																																			
<p><b>18. Quel est votre sexe</b></p> <p>Homme ..... <input type="checkbox"/></p> <p>Femme ..... <input type="checkbox"/></p>																																			
<p><b>19. Quand vous ne pratiquez pas le télétravail, combien de temps mettez-vous pour aller de votre domicile à votre lieu de travail?</b></p> <p>(matin) Minutes ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/></p> <p>(soir) Minutes ..... <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/></p>																																			
<p><b>20. Quel moyen de transport utilisez-vous pour aller à votre lieu de travail (quand vous ne pratiquez pas le télétravail)?</b></p> <p>Bus ..... <input type="checkbox"/></p> <p>Train ..... <input type="checkbox"/></p> <p>Voiture ..... <input type="checkbox"/></p> <p>Motocycle ..... <input type="checkbox"/></p> <p>Bicyclette ..... <input type="checkbox"/></p> <p>Marche à pied ..... <input type="checkbox"/></p> <p>Autre (préciser) ..... <input type="checkbox"/></p>																																			
<p><b>21. Avez-vous en espace dédié au télétravail à domicile?</b></p> <p>Une pièce ..... <input type="checkbox"/></p> <p>Une partie d'une pièce ..... <input type="checkbox"/></p> <p><b>Si oui, rempli-t-il vos besoins? Sinon, pourquoi?</b></p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>																																			
<p><b>22. Expérience avec le télétravail. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; vertical-align: bottom;"><i><b>Veillez cocher une case par ligne</b></i></th> <th style="text-align: center; vertical-align: bottom;">Tout à fait d'accord</th> <th style="text-align: center; vertical-align: bottom;">D'accord</th> <th style="text-align: center; vertical-align: bottom;">Neutre Pas d'accord</th> <th style="text-align: center; vertical-align: bottom;">Pas du tout d'accord</th> </tr> </thead> <tbody> <tr> <td>Pour certaines tâches, j'ai besoin de voir mon collègue non-télétravailleur en personne</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Je peux joindre mon collègue non-télétravailleur facilement par téléphone ou par email</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Je communique bien la plupart du temps avec mes collègues non-télétravailleurs par téléphone ou par email</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>La prise de réunion doit prendre en compte des horaires pendant lesquels je pratique le télétravail</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Je ressens que les autres ont le sentiment que je ne suis pas aussi engagé à mon poste</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>J'ai le même niveau de responsabilité par rapport à une personne qui a son lieu de travail au bureau</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>	<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord	Pour certaines tâches, j'ai besoin de voir mon collègue non-télétravailleur en personne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Je peux joindre mon collègue non-télétravailleur facilement par téléphone ou par email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Je communique bien la plupart du temps avec mes collègues non-télétravailleurs par téléphone ou par email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	La prise de réunion doit prendre en compte des horaires pendant lesquels je pratique le télétravail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Je ressens que les autres ont le sentiment que je ne suis pas aussi engagé à mon poste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	J'ai le même niveau de responsabilité par rapport à une personne qui a son lieu de travail au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord																															
Pour certaines tâches, j'ai besoin de voir mon collègue non-télétravailleur en personne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Je peux joindre mon collègue non-télétravailleur facilement par téléphone ou par email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Je communique bien la plupart du temps avec mes collègues non-télétravailleurs par téléphone ou par email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
La prise de réunion doit prendre en compte des horaires pendant lesquels je pratique le télétravail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Je ressens que les autres ont le sentiment que je ne suis pas aussi engagé à mon poste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
J'ai le même niveau de responsabilité par rapport à une personne qui a son lieu de travail au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															

Je suis traité de la même façon dans les réunions que les collègues non-télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il est difficile pour mes collègues non-télétravailleurs de résoudre des urgences quand je ne suis pas au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il est plus difficile pour moi de résoudre des problèmes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il est plus difficile pour moi de rester au courant des développements nouveaux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il est plus difficile pour moi de connaître les événements courants du service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je suis moins consulté pour des sujets qui me sont importants depuis que je pratique le télétravail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mon supérieur me donne des tâches moins importantes depuis que je suis devenu un télétravailleur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>23. Quelles sont les différences entre vous et des personnes basées à plein temps au bureau?</b>					
.....					
.....					
.....					
.....					
<b>24. Télétravailleurs comparés aux non-télétravailleurs : avantages du télétravail. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :</b>					
	Tout à fait d'accord		Neutre Pas d'accord		Pas du tout d'accord
<i><b>Veillez cocher une case par ligne</b></i>					
J'ai moins de stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je me sens plus en contrôle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J'ai moins de problèmes de santé liés au travail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je suis moins interrompu au travail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>25. Quels sont les avantages clés du télétravail? Pourriez-vous donner des exemples?</b>					
.....					
.....					
.....					
.....					
<b>Quels sont les inconvénients clés? Pourriez-vous donner des exemples?</b>					
.....					
.....					
.....					
<b>26. Inconvénients du télétravail. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :</b>					
	Tout à fait d'accord		Neutre Pas d'accord		Pas du tout d'accord
<i><b>Veillez cocher une case par ligne</b></i>					

Les opportunités d'évolution de carrière pour moi sont comparable à celles des non-télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J'ai les mêmes opportunités pour me former que les non-télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mes conditions de travail (eg luminosité, chauffage, espace) sont comparables à celles des personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je suis payé de façon comparable aux personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Généralement je ressens plus d'isolement que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je n'ai pas accès aux événements sociaux au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. Télétravail, la flexibilité et l'équilibre de vie professionnelle/personnelle. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre	Pas d'accord	Pas du tout d'accord
J'ai plus de flexibilité d'organiser mes horaires à des fins personnelles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J'ai plus de flexibilité d'organiser mes horaires à des fins professionnelles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je peux organiser la vie familiale plus facilement que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Je peux gérer mon temps plus facilement que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mon travail interfère avec ma vie personnelle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C'est plus difficile de me déconnecter des soucis personnels en travaillant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**28. Quels sont les liens entre le télétravail et la flexibilité et l'équilibre de vie professionnelle/personnelle ?**

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**29. Caractéristiques d'un télétravailleur. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre	Pas d'accord	Pas du tout d'accord
Demande un niveau de motivation élevé	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de pouvoir travailler seul	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demande de la tenacité	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin d'être organisé	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Doit résoudre des problèmes de façon indépendante	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de connaissances informatiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A une relation de confiance avec son supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A une relation de confiance avec ses pairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de gérer le 'surtravail'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doit gérer les distractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de bonnes connaissance en communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**30. Quelles caractéristiques sont importantes pour vous en tant que télétravailleur?**

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**31. Aspects techniques. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

*Veillez cocher une case par ligne*

	Tout à fait d'accord	D'accord	Neutre	Pas du tout Pas d'accord	d'accord
--	-------------------------	----------	--------	-----------------------------	----------

Je depends plus d'une connexion internet fiable que des personnes travaillant au bureau

Je peux résoudre des questions techniques (logiciels etc.) à distance de façon comparable aux personnes travaillant au bureau

**32. Quelles sont les difficultés des aspects techniques liés au télétravail?**

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**33. Avantages de la gestion des télétravailleurs. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

*Veillez cocher une case par ligne*

	Tout à fait d'accord	D'accord	Neutre	Pas du tout Pas d'accord	d'accord
--	-------------------------	----------	--------	-----------------------------	----------

Le télétravail engendre une baisse de coûts pour le budget de mon service

Les télétravailleurs utilisent moins d'espace dans les bureaux

Les télétravailleurs sont moins souvent en congé maladie que les personnes travaillant au bureau

Le télétravail permet aux supérieurs de donner des projets en dehors des heures de bureau traditionnelles

Le télétravail permet aux supérieurs d'éviter des conflits personnels au bureau



(eg séparer les employés)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail permet aux supérieurs de gérer les espaces bureau De façon efficace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>34. Quels sont les avantages liés à la gestion des télétravailleurs de votre point de vue?</b>					
.....					
.....					
.....					
.....					
.....					
<b>35. Inconvénients de la gestion des télétravailleurs. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :</b>					
<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord	
Le télétravail interrompt des projets pour mon supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il y a plus de difficultés à gérer les télétravailleurs à cause d'un manque de contact visual, par rapport aux personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il y plus difficile de superviser les télétravailleurs par rapport aux personnes travaillant au bureau pour mon supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il y a moins de communication personnelle avec les télétravailleurs par rapport aux personnes travaillant au bureau pour mon supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
La performance des télétravailleurs est plus difficile à gérer par rapport aux personnes travaillant au bureau pour mon supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail provoque un manque de motivation des personnels pour mon supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail provoque des difficultés d'organisation de travail pour mon Supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>36. Quels sont les inconvénients de la gestion des télétravailleurs, de votre point de vue?</b>					
.....					
.....					
.....					
.....					
<b>37. Le télétravail et la productivité. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :</b>					
<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord	
Le télétravail provoque un gain de productivité pour les télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail permet de mieux suivre ma productivité (pour mon supérieur)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>41. Quel est l'impact du télétravail sur la productivité individuelle, de votre point de vue?</b>					

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**39. La capacité d'attirer et de retenir des personnels. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre	Pas du tout d'accord	Pas du tout d'accord
Le télétravail attire des candidats de haut niveau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les programmes de télétravail attirent des candidats qui vivent en dehors de votre région	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les programmes de télétravail sont considérés comme un avantage pour les personnels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les programmes de télétravail permettent à mon employeur d'être compétitif avec d'autres employeurs qui proposent les mêmes avantages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**40. Est-ce que le fait de pouvoir pratiquer le télétravail a eu une influence à vos intentions de rester à votre employeur?**

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*Merci de votre participation.*

*Veillez renvoyer ce questionnaire dans l'enveloppe ci-jointe à:*

**R.A. Lewis**  
**Les Sapins Argentés 1**  
**Route de Vermala 49**  
**CH-3963 Crans-Montana, VS**  
**Switzerland**

**Ou par email à:**

[ralewis@gmail.com](mailto:ralewis@gmail.com)

**Appendix 7: Questionnaire to non-teleworkers – English (original)**

QUESTIONNAIRE – NON-TELEWORKING COLLEAGUES	
CONFIDENTIAL QUESTIONNAIRE	
<p><b>Definitions of terms:</b>                      Teleworker: <i>any home-based telework programme participant</i>                      Non-teleworking colleague: <i>any home-based telework programme participant colleague working in a similar post who is working full-time and is office-based.</i>                      Line manager/manager: <i>any line manager who currently supervises a home-based telework programme participant.</i></p> <p><b>All data will be kept strictly confidential. Individuals will not be identified nor will people be named in the study. The study is purely for purposes of academic research.</b></p> <p><i>Please answer all the questions by:</i></p> <ul style="list-style-type: none"> <li>• putting a tick in box, like this ..... <input checked="" type="checkbox"/></li> <li>• or by writing in a number, like this ..... 12</li> <li>• or by providing details which can be put on the back of the questionnaire if necessary</li> </ul>	
EMPLOYMENT	
<p><b>1. Job position :</b> .....</p>	
<p><b>2. What are your educational/professional qualifications? (please tick all that apply):</b></p> <p>Degree level or above ..... <input type="checkbox"/></p> <p>Secondary school (BAC level) ..... <input type="checkbox"/></p>	
<p><b>3. Where do you currently work? Please specify:</b></p> <p>Directorate .....                      (write full name) .....</p> <p>Section .....                      (write full name) .....</p> <p>Location .....                      (write address) .....</p>	
<p><b>4. How long have you worked at your organisation?</b></p> <p>Please write in number of years and months</p> <p>..... years ..... months</p>	
<p><b>5. How long have you worked in your current post?</b></p> <p>..... years ..... months</p>	
<p><b>6. How long have you been working with teleworkers in your current post?</b></p> <p>..... years ..... months</p>	
<p><b>7. What is your current status?</b></p> <p>Permanent staff.....</p> <p>Non-permanent staff (please specify type).....</p>	
PATTERNS OF WORK	
<p><b>8. Is your current post full-time or part-time?</b>                      (Please tick ONE box and enter the number of hours for part-time)</p> <p>Full-time ..... <input type="checkbox"/></p>	

Part-time .....	<input type="checkbox"/>
Total number of contracted hours per week : .....	<input type="checkbox"/> <input type="checkbox"/> hours
<b>9. Do you telework at any other location than your home?</b>	
If yes, where : .....	
How many hours per week per location : .....	
How many hours per month per location : .....	
<b>10. Do you have to agree a fixed pattern of work with your manager or can you work the hours you want ?</b>	
.....	
.....	
.....	
<b>11. If you want to alter your pattern of work, will your line manager usually agree?</b>	
Always .....	<input type="checkbox"/>
Usually .....	<input type="checkbox"/>
Sometimes.....	<input type="checkbox"/>
Never .....	<input type="checkbox"/>
<b>12. Do you often work extra hours? If yes, how often and when?</b>	
Per week (on average) .....	<input type="checkbox"/>
Per month (on average) .....	<input type="checkbox"/>
When (eg evenings, weekends, holidays).....	
.....	
.....	
.....	
<b>13. Are you under pressure to work extra hours in your current position?</b>	
Yes .....	<input type="checkbox"/>
Why ?.....	
.....	
No .....	<input type="checkbox"/>
<b>PROGRAMME EXPERIENCES</b>	
<b>14. What are your experiences working with teleworkers in the telework programme?</b>	
.....	
.....	
.....	
.....	
.....	
<b>PARTICIPANT PROFILE</b>	
<b>15. What is your age ?</b>	
.....	<input type="checkbox"/> <input type="checkbox"/>
<b>16. What is your gender (tick one)</b>	
Female .....	<input type="checkbox"/>
Male .....	<input type="checkbox"/>
<b>17. How long does it typically take to commute from your home to your workplace?</b>	
(morning) Minutes .....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
(evening) Minutes .....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>18. How do you usually commute (eg public transportation) to come to work?</b>	

Bus .....	<input type="checkbox"/>
Train .....	<input type="checkbox"/>
Car .....	<input type="checkbox"/>
Motorbike .....	<input type="checkbox"/>
Bicycle .....	<input type="checkbox"/>
Walk .....	<input type="checkbox"/>
Other (specify) .....	<input type="checkbox"/>

**19. Experience with teleworkers. Please indicate how far you agree with the following statements:**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
For certain tasks, I need to see my teleworking colleagues in person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can reach my teleworking colleagues with ease by phone or e-mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My teleworking colleagues and I communicate well on most issues by phone or email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meetings schedules need to take into account when my colleagues Telework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers are often viewed as not committed to their jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers have the same level of job responsibility compared to a person in a similar job who is office-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers are treated the same as non-teleworking colleagues in meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is difficult for me to resolve urgent issues when my teleworking colleagues are not in the office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is harder to sort out problems for teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is harder to keep up to date with new Developments for teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is harder to find out what is going on in the department for teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers are consulted less on matters of importance to them since becoming a teleworker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My manager gives less challenging tasks to teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**20. What differences do you feel there are between teleworkers and office-based workers?**

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**21. Teleworkers compared to non-teleworkers : advantages of teleworking. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Teleworkers have less stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Teleworkers feel more in control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers experience fewer health-related problems due to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers have fewer interruptions at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**22. What are the main advantages of teleworking, from the perspective of a non-teleworking colleague? Can you give examples?**

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**What are the main disadvantages, from the perspective of a non-teleworking colleague? Can you give examples?**

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**23. Disadvantages of teleworking. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Teleworker career opportunities are comparable to those of non-teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers receive the same training opportunities as office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworker working conditions (eg lighting, heating, space) are comparable to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers receive comparable pay to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers can generally experience more isolation than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers miss out on the social aspects of Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**24. Telework and flexible schedules/work-life balance. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Teleworkers have more flexibility in arranging non-work related schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers have more flexibility in arranging work related schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Teleworkers can accommodate family responsibilities more easily than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers can manage time more effectively than non-teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For teleworkers, work spills over into their personal lives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is more difficult for teleworkers to cut off from personal worries at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**25. How does telework impact work flexibility and work/life balance, from the perspective of a non-teleworking colleague?**

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**26. Personal characteristics of teleworkers. Please indicate the extent to which you agree or disagree with the following statements :**

<i>PLEASE TICK ONE BOX IN EACH LINE</i>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Require high levels of motivation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to be able to work alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Require tenacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to be organised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to solve problems independently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need technological literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have a trusting relationship with line managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have trusting relationships with peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to manage tendencies to overwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need to manage distractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need good communication skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. What personal characteristics are important for a teleworker, from the perspective of a non-teleworking colleague?**

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**28. Technical issues. Please indicate the extent to which you agree or disagree with the following statements :**

<b><i>PLEASE TICK ONE BOX IN EACH LINE</i></b>	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Teleworkers depend more on reliable internet access than than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teleworkers can resolve technical questions (related to IT software) at a distance in a comparable manner to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>29. What technical issues affect telework, from the perspective of a non-teleworking colleague?</b>					
.....					
.....					
.....					
.....					
.....					
.....					

*Many thanks for your participation.*

*Please return the questionnaire in the envelope provided to:*  
**R.A. Lewis**  
**Les Sapins Argentés 1**  
**Route de Vermala 49**  
**CH-3963 Crans-Montana, VS**  
**Switzerland**

*Or by email to:*  
[ralewis@gmail.com](mailto:ralewis@gmail.com)



**Appendix 8: Questionnaire to non-teleworkers – French (translated from the English)**

QUESTIONNAIRE – COLLEGUES NON-TELETRAVAILLEURS	
QUESTIONNAIRE CONFIDENTIEL	
<p><b>Définitions:</b>  Télétravailleur: <i>participant qui travaille depuis son domicile.</i>  Collègue non-télétravailleur: <i>participant qui travaille avec un télétravailleur et qui occupe son poste à plein-temps.</i>  Supérieur: <i>participant qui supervise un télétravailleur.</i></p> <p><b>Toutes les données sont strictement confidentielles. Les participants à cette étude ne seront pas identifiables. Cette étude est purement pour la recherche académique.</b></p> <p><i>Veillez répondre à toutes les questions comme ceci:</i></p> <ul style="list-style-type: none"> <li>* Cocher une case ..... <input checked="" type="checkbox"/></li> <li>* Ou par mettre un chiffre..... 12</li> <li>* Ou par donner des détails par écrit, au verso du questionnaire aussi, si nécessaire.</li> </ul>	
EMPLOI	
<p><b>1. Poste :</b> .....</p>	
<p><b>2. Quelles sont vos qualifications? (cocher tout ce qui s’y applique):</b></p> <p>Etudes supérieures ..... <input type="checkbox"/></p> <p>Etudes secondaires (niveau Bac) ..... <input type="checkbox"/></p>	
<p><b>3. Ou travaillez-vous?:</b></p> <p>Département .....</p> <p>Service .....</p> <p>Ville .....</p> <p>(adresse) .....</p>	
<p><b>4. Depuis quand travaillez-vous à votre organisme?</b></p> <p>En années/mois:</p> <p>..... années ..... mois</p>	
<p><b>5. Depuis quand travaillez-vous dans votre poste actuel?</b></p> <p>..... années ..... mois</p>	
<p><b>6. Depuis quand travaillez-vous avec des télétravailleurs dans votre poste actuel?</b></p> <p>..... années ..... mois</p>	
<p><b>7. Quel est votre statut actuel?</b></p> <p>CDI.....</p> <p>CDD ou autre (veuillez préciser).....</p>	
HORAIRES	
<p><b>8. Votre poste est-il à plein-temps ou à temps-partiel?</b>  <i>(Veillez cocher une case et mettre le nombre d’heures par semaine)</i></p>	

Plein-temps .....	<input type="checkbox"/>
Temps-partiel .....	<input type="checkbox"/>
Nombre total d'heures travaillées par semaine : .....	<input type="checkbox"/> <input type="checkbox"/> heures
<b>9. Pratiquez-vous le télétravail ailleurs qu'à votre domicile?</b>	
Où : .....	
Combien d'heures par semaine et par endroit? :	
.....	
Combien d'heures par mois et par endroit? :	
.....	
<b>10. Avez-vous des horaires réguliers, en accord avec votre supérieur, ou avez-vous les horaires que vous souhaitez?</b>	
.....	
.....	
.....	
<b>11. Si vous voulez modifier vos horaires, votre supérieur est-il (elle) d'accord?</b>	
Toujours .....	<input type="checkbox"/>
Souvent .....	<input type="checkbox"/>
Des fois.....	<input type="checkbox"/>
Jamais .....	<input type="checkbox"/>
<b>12. Travaillez-vous des heures supplémentaires? Si oui, quand?</b>	
Par semaine (en moyenne) .....	<input type="checkbox"/>
Par mois (en moyenne) .....	<input type="checkbox"/>
Quand (par exemple soirées, weekends, vacances).....	
.....	
.....	
.....	
<b>13. Subissez-vous de la pression pour travailler des heures supplémentaires dans votre poste?</b>	
Oui .....	<input type="checkbox"/>
Pourquoi ?.....	
.....	
Non .....	<input type="checkbox"/>
<b>EXPERIENCES</b>	
<b>14. Quelles sont vos expériences en travaillant avec des télétravailleurs?</b>	
.....	
.....	
.....	
.....	
.....	
<b>PROFIL</b>	
<b>15. Quel est votre âge ?</b>	
.....	<input type="checkbox"/> <input type="checkbox"/>
<b>16. Quel est votre sexe</b>	
Homme .....	<input type="checkbox"/>
Femme .....	<input type="checkbox"/>
<b>17. Combien de temps mettez-vous pour aller de votre domicile à votre lieu de travail?</b>	
(matin) Minutes .....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

(soir) Minutes .....	□□□				
<b>18. Quel moyen de transport utilisez-vous pour aller à votre lieu de travail (quand vous ne pratiquez pas le télétravail)?</b>					
Bus .....	<input type="checkbox"/>				
Train .....	<input type="checkbox"/>				
Voiture .....	<input type="checkbox"/>				
Motocycle .....	<input type="checkbox"/>				
Bicyclette .....	<input type="checkbox"/>				
Marche à pied .....	<input type="checkbox"/>				
Autre (préciser) .....	<input type="checkbox"/>				
<b>19. Expérience avec des télétravailleurs. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes:</b>					
<i><b>Veillez cocher une case par ligne</b></i>	<table style="display: inline-table; border: none;"> <tr> <td style="text-align: center;">Tout à fait d'accord</td> <td style="text-align: center;">D'accord</td> <td style="text-align: center;">Neutre Pas d'accord</td> <td style="text-align: center;">Pas du tout d'accord</td> </tr> </table>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord
Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord		
Pour certaines tâches j'ai besoin de voir mon collègue télétravailleur en personne	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Je peux joindre mon collègue télétravailleur facilement par téléphone ou par email	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Je communiqué de façon efficace avec mes collègues qui télétravaillent par telephone ou par email	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
La prise de réunion doit prendre en compte les horaires de mes collègues qui télétravaillent	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Les télétravailleurs sont souvent vus comme des personnels moins engagés dans leur travail	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Les télétravailleurs ont le même niveau de responsabilité par rapport aux personnes travaillant au bureau	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Les télétravailleurs sont traités de la même manière que les non-télétravailleurs dans Les réunions	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Il est difficile pour moi de résoudre des urgencies quand mes collègues télétravailleurs sont absents du bureau	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Pour les télétravailleurs il est plus difficile de résoudre des problèmes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Pour les télétravailleurs il est plus difficile de connaître des développements nouveaux	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Pour les télétravailleurs il est plus difficile de connaître des événements courants du service	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Les télétravailleurs sont moins consultés pour des sujets qui me sont importants depuis qu'ils pratiquent le télétravail	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Mon supérieur donne des tâches moins importantes aux télétravailleurs	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
<b>20. Quelles sont les différences entre vous et des personnes basées à plein temps au bureau?</b>					
.....					
.....					
.....					
.....					
.....					
<b>21. Télétravailleurs compares aux non-télétravailleurs : avantages du télétravail. Merci d'indiquer</b>					

**vosre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord		Neutre Pas d'accord		Pas du tout d'accord
Les télétravailleurs ont moins de stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs sont plus en contrôle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs ont moins de problèmes de santé liés au travail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs sont moins interrompus au travail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**22. Quels sont les avantages clés du télétravail, selon la perspective d'un collègue non-télétravailleur? Pourriez-vous donner des exemples?**

.....

.....

.....

.....

.....

**Quels sont les inconvénients clés du télétravail, selon la perspective d'un collègue non-télétravailleur? Pourriez-vous donner des exemples?**

.....

.....

.....

.....

.....

**23. Inconvénients du télétravail. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord		Neutre Pas d'accord		Pas du tout d'accord
Les opportunités d'évolution de carrière pour les télétravailleurs sont comparables à celles des non-télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs ont les mêmes opportunités pour se former que les non-télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les conditions de travail des télétravailleurs (eg luminosité, chauffage, espace) sont comparables à celles des personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs sont payés de façon comparable aux personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Généralement les télétravailleurs ressentent plus d'isolement que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs n'ont pas accès aux événements sociaux au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**24. Télétravail, la flexibilité et l'équilibre de vie professionnelle/personnelle. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord		Neutre Pas d'accord		Pas du tout d'accord
Les télétravailleurs ont plus de flexibilité d'organiser des horaires à des fins personnelles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Les télétravailleurs ont plus de flexibilité d'organiser mes horaires à des fins professionnelles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs peuvent organiser la vie familiale plus facilement que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs peuvent gérer mon temps plus facilement que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pour les télétravailleurs leur travail interfère avec leur vie personnelle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C'est plus difficile pour les télétravailleurs de se déconnecter des soucis personnels au travail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**25. Quels sont liens entre le télétravail et la flexibilité et l'équilibre de vie professionnelle/personnelle, du point de vue d'un collègue non-télétravailleur ?**

.....

.....

.....

.....

.....

.....

**26. Caractéristiques d'un télétravailleur. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait d'accord	D'accord	Neutre	Pas d'accord	Pas du tout d'accord
Demande un niveau de motivation élevé	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de pouvoir travailler seul	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demande de la tenacité	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin d'être organisé	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doit résoudre des problèmes de façon indépendante	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de connaissances informatiques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A une relation de confiance avec son supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A une relation de confiance avec ses pairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de gérer le 'surtravail'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doit gérer les distractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A besoin de bonnes connaissances en communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. Quelles caractéristiques sont importantes, selon vous en tant que collègue non-télétravailleur?**

.....

.....

.....

.....

.....

.....

**28. Aspects techniques. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

*Veillez cocher une case par ligne*

	Tout à fait		Neutre		Pas du tout
	d'accord	D'accord	Pas d'accord	d'accord	d'accord

Les télétravailleurs dependent plus d'une connexion internet fiable que des personnes travaillant au bureau

Les télétravailleurs peuvent résoudre des questions techniques (logiciels etc.) à distance de façon comparable aux personnes travaillant au bureau

**29. Quelles sont les difficultés des aspects techniques liés au télétravail, de votre point de vue en tant que collègue non-télétravailleur?**

.....

.....

.....

.....

.....

.....

**Merci de votre participation.**

**Veillez renvoyer ce questionnaire dans l'enveloppe ci-jointe à:**

**R.A. Lewis  
 Les Sapins Argentés 1  
 Route de Vermala 49  
 CH-3963 Crans-Montana, VS  
 Switzerland**

**Ou par email à:**

[ralewis@gmail.com](mailto:ralewis@gmail.com)

## Appendix 9: Questionnaire to line managers – English (original)

QUESTIONNAIRE – LINE MANAGERS
<p><b>CONFIDENTIAL QUESTIONNAIRE</b></p>
<p><b>Definitions of terms:</b>            Teleworker: <i>any home-based telework programme participant</i>            Non-teleworking colleague: <i>any home-based telework programme participant colleague working in a similar post who is working full-time and is office-based.</i>            Line manager/manager: <i>any line manager who currently supervises a home-based telework programme participant.</i></p>
<p><b>All data will be kept strictly confidential. Individuals will not be identified nor will people be named in the study. The study is purely for purposes of academic research.</b></p>
<p><i>Please answer all the questions by:</i></p> <ul style="list-style-type: none"> <li>• putting a tick in box, like this ..... <input checked="" type="checkbox"/></li> <li>• or by writing in a number, like this..... 12</li> <li>• or by providing details which can be put on the back of the questionnaire if necessary</li> </ul>
<b>EMPLOYMENT</b>
<p><b>1. Job position:</b> .....</p>
<p><b>2. What are your educational/professional qualifications? (please tick all that apply):</b></p> <p>Degree level or above ..... <input type="checkbox"/></p> <p>Secondary school (BAC level) ..... <input type="checkbox"/></p> <p>Have you had any management education or training?..... <input type="checkbox"/></p>
<p><b>3. Where do you currently work? Please specify:</b></p> <p>Directorate .....  <i>(write full name)</i> .....</p> <p>Section .....  <i>(write full name)</i> .....</p> <p>Location .....  <i>(write address)</i> .....</p> <p>.....</p>
<p><b>4. How long have you worked at your organisation?</b></p> <p>Please write in number of years and months</p> <p>..... years ..... months</p>
<p><b>5. How long have you worked in your current post?</b></p> <p>..... years ..... months</p>
<p><b>6. How long have you been teleworking in your current post?</b></p> <p>..... years ..... months</p>
<p><b>7. What is your current status?</b></p> <p>Permanent staff.....</p> <p>Non-permanent staff (please specify type).....</p>

**PATTERNS OF WORK**

**8. Is your current post full-time or part-time?**  
*(Please tick ONE box and enter the number of hours for part-time)*

- Full-time .....
- Part-time .....
- Total number of contracted hours per week : .....  hours

**9. Do you telework at any other location than your home?**

Where : .....

How many hours per week per location : .....

How many hours per month per location : .....

**10. Do you have to agree a fixed pattern of work with your teleworker or can he/she work the hours he/she wants?**

.....

.....

.....

**11. If your teleworker wants to alter his/her pattern of work, will you usually agree?**

- Always .....
- Usually .....
- Sometimes.....
- Never .....

**12. Is your teleworker under pressure to work extra hours in his/her current position?**

- Yes .....
- Why ?.....
- .....
- No .....

**PROGRAMME EXPERIENCES**

**13. Why did you choose to take part in the telework programme study, as a line manager?**

.....

.....

.....

.....

**14. On what criteria did you choose teleworkers?**

.....

.....

.....

.....

**15. Is it more difficult to assess the performance of teleworkers compared to office-based workers?**

- Yes .....
- No .....

**If yes, how?**.....

.....

.....

.....



.....  
.....  
.....

**16. Is the quality of the work teleworkers do better, worse, or the same compared with that of office-based workers doing the same job?**

Better .....   
Worse.....   
The same .....

**17. Do your teleworkers do the same jobs as office-based workers?**

Yes .....   
No .....

**If no, how are they different?.....**  
.....  
.....  
.....  
.....  
.....  
.....

**18. Do you have problems communicating with teleworkers compared with office-based workers?**

Yes .....   
No .....

**If yes, please give examples.....**  
.....  
.....  
.....  
.....

**19. Is teamwork an important aspect of jobs in your department?**

Yes .....   
No .....

**If yes, does telework affect this in any way?.....**  
.....  
.....  
.....  
.....

**20. Taking everything into account, has the telework programme met your expectations?**

Yes .....   
No .....

**Please explain why.....**  
.....  
.....  
.....  
.....

**PARTICIPANT PROFILE**

<b>21. What is your age ?</b> .....	□□																																																												
<b>22. What is your gender (tick one)</b> Female .....	□																																																												
Male .....	□																																																												
<b>23. Advantages of managing teleworkers. Please indicate the extent to which you agree or disagree with the following statements :</b>																																																													
<b><i>PLEASE TICK ONE BOX IN EACH LINE</i></b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 10%; text-align: center;">Strongly Agree</th> <th style="width: 10%; text-align: center;">Agree</th> <th style="width: 10%; text-align: center;">Neither agree nor disagree</th> <th style="width: 10%; text-align: center;">Disagree</th> <th style="width: 10%; text-align: center;">Strongly disagree</th> </tr> </thead> <tbody> <tr> <td>Telework is cost-saving for the Directorate Budget</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Teleworkers use less office-space</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Teleworkers take less sick-leave than office-based workers</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Overall teleworkers are as productive as office-based workers doing the same job</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Teleworkers are just as committed to their careers as office-based Workers</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Teleworkers are offered the same opportunities to train as office-based workers</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Telework allows me as a line manager to assign projects outside of traditional office-based hours</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Telework allows me as a line manager to avoid personnel conflicts in the office (eg separating employees)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Telework allows me as a line manager to effectively manage office space</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Telework is cost-saving for the Directorate Budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Teleworkers use less office-space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Teleworkers take less sick-leave than office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Overall teleworkers are as productive as office-based workers doing the same job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Teleworkers are just as committed to their careers as office-based Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Teleworkers are offered the same opportunities to train as office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Telework allows me as a line manager to assign projects outside of traditional office-based hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Telework allows me as a line manager to avoid personnel conflicts in the office (eg separating employees)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Telework allows me as a line manager to effectively manage office space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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<b>24. What are the advantages of managing teleworkers from the perspective of a line manager?</b> ..... ..... ..... ..... .....																																																													
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<b><i>PLEASE TICK ONE BOX IN EACH LINE</i></b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 10%; text-align: center;">Strongly Agree</th> <th style="width: 10%; text-align: center;">Agree</th> <th style="width: 10%; text-align: center;">Neither agree nor disagree</th> <th style="width: 10%; text-align: center;">Disagree</th> <th style="width: 10%; text-align: center;">Strongly disagree</th> </tr> </thead> <tbody> <tr> <td>Telework interrupts projects, for me as a Line manager</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>There are more difficulties managing teleworkers due to less visual contact versus office-based workers</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>It is more difficult to supervise teleworkers than office-based workers for me as a line manager</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>There is less personal communication with teleworkers versus office-based workers for me as a line manager</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Teleworker performance is difficult to manage versus</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Telework interrupts projects, for me as a Line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There are more difficulties managing teleworkers due to less visual contact versus office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It is more difficult to supervise teleworkers than office-based workers for me as a line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is less personal communication with teleworkers versus office-based workers for me as a line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Teleworker performance is difficult to manage versus																													
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office-based workers for me as a line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delegating work to teleworkers is more difficult than to office-based workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework means less motivated staff for me as a Line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework means difficulty in organising work for me as a Line manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**26. What are the disadvantages of managing teleworkers from the perspective of a line manager?**

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**27. Telework and productivity. Please indicate the extent to which you agree or disagree with the following statements :**

*PLEASE TICK ONE BOX IN EACH LINE*

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telework means higher levels of productivity for teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework allows me to more closely measure performance for teleworkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**28. What impact does telework have on individual productivity from the perspective of a line manager?**

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**29. How do you measure the productivity of your staff?**

.....

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.....

**30. The ability to attract and retain workers. Please indicate the extent to which you agree or disagree with the following statements :**

*PLEASE TICK ONE BOX IN EACH LINE*

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telework programmes attract high calibre candidates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes retain high calibre candidates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes attract candidates who live	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

outside of your region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes are seen as an advantage to workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telework programmes allow the organisation to compete with other employers who offer similar benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**31. Has telework affected the likelihood of workers being attracted to and staying at your organisation, from our perspective as a line manager?**

.....

.....

.....

.....

.....

.....

*Many thanks for your participation.*

*Please return the questionnaire in the envelope provided to:*

**R.A. Lewis**  
**Les Sapins Argentés 1**  
**Route de Vermala 49**  
**CH-3963 Crans-Montana, VS**  
**Switzerland**

**Or by email to:**

[ralewis@gmail.com](mailto:ralewis@gmail.com)

**Appendix 10: Questionnaire to line managers – French (translated from the English)**

<p><b>QUESTIONNAIRE – SUPERIEURS</b></p> <p><b>QUESTIONNAIRE CONFIDENTIEL</b></p> <p><b>Définitions:</b>  Télétravailleur: <i>participant qui travaille depuis son domicile.</i>  Collègue non-télétravailleur: <i>participant qui travaille avec un télétravailleur et qui occupe son poste à plein-temps.</i>  Supérieur: <i>participant qui supervise un télétravailleur.</i></p> <p><b>Toutes les données sont strictement confidentielles. Les participants à cette étude ne seront pas identifiables. Cette étude est purement pour la recherche académique.</b></p> <p><i>Veillez répondre à toutes les questions comme ceci:</i></p> <ul style="list-style-type: none"> <li>• Cocher une case ..... <input checked="" type="checkbox"/></li> <li>• Ou par mettre un chiffre..... 12</li> <li>• Ou par donner des détails par écrit, au verso du questionnaire aussi, si nécessaire.</li> </ul>
<b>EMPLOI</b>
<p><b>1. Poste :</b> .....</p>
<p><b>2. Quelles sont vos qualifications? (cocher tout ce qui s’y applique):</b></p> <p>Etudes supérieures ..... <input type="checkbox"/></p> <p>Etudes secondaires (niveau Bac) ..... <input type="checkbox"/></p>
<p><b>3. Ou travaillez-vous?:</b></p> <p>Département .....  .....</p> <p>Service .....  .....</p> <p>Ville .....  <i>(adresse)</i> .....  .....</p>
<p><b>4. Depuis quand travaillez-vous à votre organisme?</b></p> <p>En années/mois:  ..... années ..... mois</p>
<p><b>5. Depuis quand travaillez-vous dans votre poste actuel?</b></p> <p>..... années ..... mois</p>
<p><b>6. Depuis quand pratiquez-vous le télétravail dans votre poste actuel?</b></p> <p>..... années ..... mois</p>
<p><b>7. Quel est votre statut actuel?</b></p> <p>CDI.....  CDD ou autre (veuillez préciser).....</p>
<b>HORAIRES</b>

**8. Votre poste est-il à plein-temps ou à temps-partiel?**  
*(Veuillez cocher une case et mettre le nombre d'heures par semaine)*

Plein-temps .....

Temps-partiel .....

Nombre total d'heures travaillées par semaine : .....  heures

**9. Pratiquez-vous le télétravail ailleurs qu'à votre domicile?**

Où : .....

Combien d'heures par semaine et par endroit? :  
 .....

Combien d'heures par mois et par endroit? :  
 .....

**10. Avez-vous des horaires réguliers, en accord avec votre télétravailleur ou peut-il travailler les horaires qu'il souhaite?**

.....

.....

.....

**11. Si votre télétravailleur souhaite modifier ses horaires, êtes-vous d'accord?**

Toujours .....

Souvent .....

Des fois .....

Jamais .....

**12. Votre télétravailleur subit-il de la pression pour travailler des heures supplémentaires dans son poste?**

Oui .....

Pourquoi ?.....

Non .....

**EXPERIENCES**

**13. Pourquoi avez-vous choisi de participer au programme de télétravail, en tant que supérieur d'un télétravailleur?**

.....

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.....

**14. Quels critères avez-vous utilisés pour choisir les télétravailleurs?**

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.....

.....

**15. Est-il plus difficile d'évaluer la performance des télétravailleurs par rapport aux non-télétravailleurs?**

Oui .....

Non .....

Si oui, pourquoi?.....

.....  
.....  
.....  
.....  
.....

**16. La qualité du travail des télétravailleurs est-elle meilleure, pire ou la même que celle des non-télétravailleurs occupant un poste semblable?**

- Meilleure .....   
Pire.....   
La même .....

**17. Vos télétravailleurs font-ils le même travail que vos personnels non-télétravailleurs?**

- Oui .....   
Non .....

**Si non, comment sont-ils**

**différents?.....**

.....  
.....  
.....  
.....  
.....

**18. Avez-vous des problèmes de communication avec vos télétravailleurs par rapport aux personnels non-télétravailleurs?**

- Oui .....   
Non .....

**Si oui, pourriez-vous donner des exemples ?.....**

.....  
.....  
.....  
.....

**19. Le travail en équipe est-il important dans votre service?**

- Oui .....   
Non .....

**Si oui, est-ce le télétravail a un effet sur le travail en équipe ?**

.....  
.....  
.....

**20. Tout pris en compte, le programme de télétravail a-t-il rempli vos attentes?**

- Oui .....   
Non .....

**Si oui, comment?**

.....

.....

.....

.....

.....

**PROFIL**

**21. Quel est votre âge ?**

.....

**22. Quel est votre sexe**

Homme .....   
 Femme .....

**23. Avantages de la gestion des télétravailleurs. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i>Veillez cocher une case par ligne</i>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord
Le télétravail engendre une baisse de coûts pour le budget de mon service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs utilisent moins d'espace dans les bureaux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs sont moins souvent en congé maladie que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs sont aussi productifs que les personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs sont aussi engagés dans leur carrière que leurs collègues non-télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les télétravailleurs ont les mêmes opportunités de se former que leurs collègues travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail me permet de donner des projets en dehors des heures de bureau traditionnelles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail permet aux supérieurs d'éviter des conflits personnels au bureau (eg séparer les employés)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail permet aux supérieurs de gérer les espaces bureau de façon efficace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**24. Quels sont les avantages liés à la gestion des télétravailleurs d'un point de vue d'un supérieur?**

.....

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.....

.....

**25. Inconvénients de la gestion des télétravailleurs. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i>Veillez cocher une case par ligne</i>	Tout à fait d'accord	D'accord	Neutre Pas d'accord	Pas du tout d'accord
Le télétravail interrompt des projets pour moi en tant que supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il y a plus de difficultés à gérer les télétravailleurs à cause d'un manque de contact visual, par rapport aux	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il y a plus difficile de superviser les télétravailleurs par rapport aux personnes travaillant au bureau pour moi en tant que supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il y a moins de communication personnelle avec les télétravailleurs par rapport aux personnes travaillant au bureau pour moi en tant que supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
La performance des télétravailleurs est plus difficile à gérer par rapport aux personnes travaillant au bureau pour moi en tant que supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail provoque un manque de motivation des personnels pour moi en tant que supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Il est plus difficile de déléguer du travail aux télétravailleurs par rapport aux personnes travaillant au bureau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail provoque des difficultés d'organisation de travail pour moi en tant que supérieur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**26. Quels sont les inconvénients de la gestion des télétravailleurs, de votre point de vue en tant que supérieur?**

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.....

**27. Le télétravail et la productivité. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i>Veillez cocher une case par ligne</i>	Tout à fait		Neutre		Pas du tout	
	d'accord	D'accord	Pas d'accord	d'accord	d'accord	d'accord
Le télétravail provoque un gain de productivité pour les télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail me permet de mieux suivre la productivité des télétravailleurs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**29. De votre point de vue en tant que supérieur, quel est l'effet du télétravail sur a productivité individuelle?**

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**29. Comment évaluez-vous la productivité de vos personnels?**

.....

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**30. La capacité d'attirer et de retenir des personnels. Merci d'indiquer votre accord ou désaccord avec les phrases suivantes :**

<i><b>Veillez cocher une case par ligne</b></i>	Tout à fait		Neutre		Pas du tout	
	d'accord	D'accord	Pas d'accord	Pas d'accord	d'accord	d'accord
Le télétravail attire des candidats de haut niveau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Le télétravail retient des candidats de haut niveau	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les programmes de télétravail attirent des candidats qui vivent en dehors de votre région	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les programmes de télétravail sont considérés comme un avantage pour les personnels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Les programmes de télétravail permet à mon employeur d'être compétitif avec d'autres employeurs qui proposent les mêmes avantages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

  

**31. Est-ce que le fait de pouvoir pratiquer le télétravail a eu une influence aux intentions des personnels de rester à votre organisme, de votre point de vue en tant que supérieur?**

.....

.....

.....

.....

.....

.....

*Merci de votre participation.*

*Veillez renvoyer ce questionnaire dans l'enveloppe ci-jointe à:*

**R.A. Lewis**  
**Les Sapins Argentés 1**  
**Route de Vermala 49**  
**CH-3963 Crans-Montana, VS**  
**Switzerland**

**Ou par email à:**

[ralewis@gmail.com](mailto:ralewis@gmail.com)

## Appendix 11: Tables

Tables in this appendix are sorted in numerical order. In tables, when necessary, abbreviations are used: teleworkers are referred to as 'TW,' non-teleworking colleagues as 'NTW' and line managers as 'LM.' In tables 'not answered' is referred to as 'NA.'

**Table 3.2: Questionnaire replies as of 19<sup>th</sup> July 2010: teleworkers.**

	<i>Frequency</i>	<i>Percent</i>
Questionnaires sent	25	100%
Questionnaires received	5	20%

**Table 3.3: Questionnaire replies as of 19<sup>th</sup> July 2010: non-teleworking colleagues.**

	<i>Frequency</i>	<i>Percent</i>
Questionnaires sent	25	100%
Questionnaires received	4	16%

**Table 3.4: Questionnaire replies as of 19<sup>th</sup> July 2010: line managers.**

	<i>Frequency</i>	<i>Percent</i>
Questionnaires sent	25	100%
Questionnaires received	5	20%

**Table 3.5: Questionnaire replies by 30<sup>th</sup> September 2010 (final): teleworkers.**

	<i>Frequency</i>	<i>Percent</i>
Questionnaires sent	25	100%
Questionnaires received	16	64%

**Table 3.6: Questionnaire replies by 30<sup>th</sup> September 2010 (final): non-teleworking colleagues.**

	<i>Frequency</i>	<i>Percent</i>
Questionnaires sent	25	100%
Questionnaires received	11	44%

**Table 3.7: Questionnaire replies by 30<sup>th</sup> September 2010 (final): line managers.**

	<i>Frequency</i>	<i>Percent</i>
Questionnaires sent	25	100%
Questionnaires received	10	40%

**Table 3.8: Educational qualifications.**

	<i>Degree level or above</i>	<i>Secondary school level</i>	<i>Not answered</i>	<i>Total</i>
Teleworkers	13	2	1	16
Non-teleworking colleagues	6	5	0	11
Line managers	9	1	0	10

**Table 3.9: Length of service at the CGF.**

	<i>Average number of years</i>
Teleworkers	9.8
Non-teleworking colleagues	12.8
Line managers	16.6

**Table 3.10: Age and gender.**

	<i>Average age</i>	<i>Female</i>	<i>Male</i>
Teleworkers	46	12	4
Non-teleworking colleagues	48	10	1
Line managers	50	6	4

**Table 3.11: Gender: teleworkers and non-teleworking colleagues.**

	<i>Teleworkers Frequency</i>	<i>Non-teleworkers Frequency</i>
Not answered	0	0
Male	4	1
Female	12	10
Total	16	11

**Table 3.12: Years in current post at the CGF.**

	<i>Average number of years</i>
Teleworkers	6.5
Non-teleworking colleagues	7.9
Line managers	16.6

**Table 3.13: Current grade/status at the CGF.**

	<i>Professional</i>	<i>Support staff</i>
Teleworkers	11	5
Non-teleworking colleagues	6	5
Line managers	10	0

**Table 3.14: Teleworkers: how long they had teleworked in their current posts.**

	<i>Average number of months</i>
Number of months	8.9

**Table 3.15: Non-teleworking colleagues: how long they had been working with teleworkers.**

	<i>Average number of months</i>	<i>Not answered</i>
Number of months	10.6	1

**Table 3.16: Working time: full-time or part-time status of participants.**

	<i>Full-time</i>	<i>Part-time</i>
Teleworkers	16	0
Non-teleworking colleagues	9	2*
Line managers	10	0

*\*one non-teleworking colleague claimed to work 28 hours per week and one 35 hours per week*

**Table 3.17: Work patterns: fixed pattern of flexible pattern of work. Do you agree to a fixed or flexible pattern of work with your line manager?**

	<i>Fixed</i>	<i>Flexible</i>	<i>Not answered</i>
Teleworkers	12	4	0
Non-teleworking colleagues	6	3	2

**Table 3.18: Work patterns: fixed pattern of flexible pattern of work. Do you agree to a fixed or flexible pattern of work with your teleworker?**

	<i>Fixed</i>	<i>Flexible</i>	<i>NA</i>
Line managers	7	1	2

**Table 3.19: If you alter your pattern of work, will your line manager agree?**

	<i>Always</i>	<i>Usually</i>	<i>Sometimes</i>	<i>Never</i>	<i>NA</i>
Teleworkers	9	3	1	1	2
Non-teleworking colleagues	5	2	0	1	3

**Table 3.20: If your teleworker wants to alter his/her pattern of work, will you usually agree?**

	<i>Always</i>	<i>Usually</i>	<i>Sometimes</i>	<i>Never</i>	<i>NA</i>
Line managers	2	4	1	1	2

**Table 3.21: Do you often work extra hours (average)?**

	<i>Hours per month</i>
Teleworkers (ten)	10-12
Non-teleworking colleagues (four)	10-12

**Table 3.22: Are you under pressure to work extra hours in your position?**

	<i>Yes</i>	<i>No</i>	<i>NA</i>
Teleworkers	3	13	0
Non-teleworking colleagues	0	9	2

**Table 3.23: Is your teleworker under pressure to work extra hours in his/her current position?**

	<i>Yes</i>	<i>No</i>
Line managers	1	9

**Table 3.24: How long does it take for you to commute from your home to your workplace (when not teleworking: for teleworkers)?**

*Average commute in minutes per day*

	<i>Morning</i>	<i>Evening</i>
Teleworkers	46	47
Non-teleworking colleagues	16	19

**Table 3.25: How do you usually commute (when not teleworking: for teleworkers)?**

	<i>Teleworkers</i>	<i>Non-teleworkers*</i>
Bus	0	2
Train	1	0
Car	15	7
Motorbike	0	0
Bicycle	0	2
Walk	0	1
Other	0	1
Not answered	0	1

*\*Some non-teleworkers claimed more than one mode of transport*

**Table 3.26: How many hours a week do you telework from home?**

	<i>Numbers of hours</i>	<i>Not answered</i>
Teleworkers	13.2	3

**Table 3.27: Do you telework at any other location than your home (hours per location)?**

	<i>Yes</i>	<i>No</i>	<i>Hours per week</i>
Teleworkers	8	8	16

*\*teleworkers who answered yes all claimed to work at a telecentre*

**Table 4.1: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers depend more on reliable internet access than office-based workers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	4	4
Agree	6	4
Neither	3	2
Disagree	1	0
Strongly disagree	2	1
Totals	16	11

**Table 4.2: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers can resolve technical questions (related to IT) at a distance in a comparable manner to office-based workers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	9	1
Agree	4	4
Neither	1	2
Disagree	1	2
Strongly disagree	1	2
Totals	16	11

**Table 4.3: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers are often viewed not as committed to their jobs.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	0	1
Agree	2	1
Neither	4	2
Disagree	5	4
Strongly disagree	5	3
Totals	16	11



**Table 4.4: Line manager replies to the statement: Teleworkers are just as committed to their careers as office-based workers.**

	<i>Frequency LM</i>
Not answered	0
Strongly agree	6
Agree	4
Neither	0
Disagree	0
Strongly disagree	0
Totals	10

**Table 4.5: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers are consulted less on matters of importance.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	0	1
Agree	2	2
Neither	1	1
Disagree	8	5
Strongly disagree	5	2
Totals	16	11

**Table 4.6: Comparison of teleworker and non-teleworker replies to the statement: Managers give less challenging tasks to teleworkers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	0	0
Agree	1	4
Neither	1	3
Disagree	2	4
Strongly disagree	12	0
Totals	16	11

**Table 4.7: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers' career opportunities are comparable to those of non-teleworkers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	10	5
Agree	5	2
Neither	1	2
Disagree	0	2
Strongly disagree	0	0
Totals	16	11

**Table 4.8: Comparison of teleworker, non-teleworker and line manager replies to the statement: Teleworkers receive the same training opportunities as office-based workers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	11	6
Agree	4	4
Neither	1	1
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 4.9: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need to be able to work alone.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	11	5
Agree	5	5
Neither	0	1
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 4.10: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need to be organised.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	13	9
Agree	3	1
Neither	0	1
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 4.11: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need to be able to solve problems independently.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	5	5
Agree	8	4
Neither	2	1
Disagree	1	1
Strongly disagree	0	0
Totals	16	11

**Table 4.12: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need technological literacy.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	9	7
Agree	6	2
Neither	0	2
Disagree	1	0
Strongly disagree	0	0
Totals	16	11

**Table 4.13: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have trusting relationships with line managers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	9	7
Agree	6	2
Neither	1	2
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 4.14: Comparison of teleworker and non-teleworker replies to the statement: Telework requires high levels of motivation.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	6	5
Agree	7	5
Neither	2	1
Disagree	1	0
Strongly disagree	0	0
Totals	16	11

**Table 4.15: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have trusting relationships with peers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	7	7
Agree	8	2
Neither	1	2
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 4.16: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need to manage distractions.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	3	6
Agree	7	3
Neither	3	1
Disagree	2	0
Strongly disagree	1	1
Totals	16	11

**Table 4.17: Comparison of teleworker and non-teleworker replies to the statement: Telework requires tenacity.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	6	3
Agree	4	3
Neither	4	3
Disagree	2	2
Strongly disagree	0	0
Totals	16	11

**Table 4.18: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need to manage tendencies to overwork.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	6	6
Agree	8	1
Neither	1	2
Disagree	1	1
Strongly disagree	0	1
Totals	16	11

**Table 4.19: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers need good communication skills.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	2	4
Agree	10	4
Neither	4	2
Disagree	0	1
Strongly disagree	0	0
Totals	16	11

**Table 4.20: Comparison of teleworker and line manager replies to the statement: Telework means higher levels of productivity for teleworkers.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	3	0
Agree	8	4
Neither	4	4
Disagree	1	2
Strongly disagree	0	0
Totals	16	10

**Table 4.21: Line manager replies to the statement: Teleworkers are just as productive as office-based workers doing the same job.**

	<i>Frequency LM</i>
Not answered	0
Strongly agree	0
Agree	6
Neither	3
Disagree	0
Strongly disagree	1
Totals	10

**Table 4.22: Comparison of teleworker and line manager replies to the statement: Teleworkers take less sick leave than office-based workers.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	2	1
Strongly agree	3	1
Agree	1	1
Neither	7	5
Disagree	3	2
Strongly disagree	0	0
Totals	16	10

**Table 4.23: Comparison of teleworker and line manager replies to the statement: Teleworker is cost-saving for the directorate budget.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	2	0
Strongly agree	1	0
Agree	6	0
Neither	5	4
Disagree	1	4
Strongly disagree	1	2
Totals	16	10

**Table 4.24: Comparison of teleworker and line manager replies to the statement: Teleworkers use less office space.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	2	0
Strongly agree	1	0
Agree	5	1
Neither	3	5
Disagree	5	3
Strongly disagree	0	1
Totals	16	10

**Table 4.25: Comparison of teleworker and line manager replies to the statement: Telework allows managers to effectively manage office space.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	2	1
Strongly agree	1	0
Agree	2	4
Neither	7	3
Disagree	4	1
Strongly disagree	0	1
Totals	16	10

**Table 4.26: Comparison of teleworker and line manager replies to the statement: Teleworker means difficulty in organising work for my line manager.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	0	0
Agree	1	2
Neither	4	2
Disagree	8	5
Strongly disagree	3	1
Totals	16	10

**Table 4.27: Comparison of teleworker and line manager replies to the statement: Telework programmes attract high calibre candidates.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	2
Strongly agree	1	2
Agree	4	1
Neither	10	4
Disagree	1	1
Strongly disagree	0	0
Totals	16	10



**Table 4.28: Comparison of teleworker and line manager replies to the statement: Telework programmes are seen as an advantage to workers.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	2
Strongly agree	5	3
Agree	11	3
Neither	0	1
Disagree	0	1
Strongly disagree	0	0
Totals	16	10

**Table 4.29: Comparison of teleworker and line manager replies to the statement: Telework programmes allow the organisation to compete with other employers to offer similar benefits.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	2
Strongly agree	2	1
Agree	9	0
Neither	5	7
Disagree	0	0
Strongly disagree	0	0
Totals	16	10

**Table 4.30: Line manager replies to the statement: Telework programmes retain high calibre candidates.**

	<i>Frequency LM</i>
Not answered	2
Strongly agree	2
Agree	1
Neither	4
Disagree	1
Strongly disagree	0
Totals	10

**Table 5.1: Comparison of teleworker and non-teleworker replies to the statement: For certain tasks, teleworkers need to see their non-teleworking colleagues in person.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	1	0
Strongly agree	2	0
Agree	6	4
Neither	0	3
Disagree	5	2
Strongly disagree	2	2
Totals	16	11

**Table 5.2: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers can reach their non-teleworking colleagues with ease by phone or email.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	14	10
Agree	2	1
Neither	0	0
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 5.3: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers and non-teleworking colleagues communicate well on most issues by phone or email.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	14	7
Agree	2	3
Neither	0	1
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 5.4: Comparison of teleworker and non-teleworker replies to the statement: Meeting schedules need to take into account when teleworkers telework.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	2
Strongly agree	3	7
Agree	4	0
Neither	2	1
Disagree	7	1
Strongly disagree	0	0
Totals	16	11

**Table 5.5: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have the same level of job responsibility compared to a person in a similar job who is office-based.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	12	7
Agree	3	2
Neither	1	0
Disagree	0	2
Strongly disagree	0	0
Totals	16	11

**Table 5.6: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers are treated the same as non-teleworking colleagues in meetings.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	9	6
Agree	6	3
Neither	1	2
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 5.7: Comparison of teleworker and non-teleworker replies to the statement: It is difficult for non-teleworking colleagues to resolve urgent issues when teleworkers are not in the office.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	0	1
Agree	2	2
Neither	4	1
Disagree	5	5
Strongly disagree	5	2
Totals	16	11

**Table 5.8: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers' working conditions (e.g., lighting, heating, space) are comparable to office-based workers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	5	3
Agree	6	2
Neither	2	3
Disagree	3	3
Strongly disagree	0	0
Totals	16	11

**Table 5.9: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers receive comparable pay to office-based workers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	12	7
Agree	3	2
Neither	1	2
Disagree	0	0
Strongly disagree	0	0
Totals	16	11

**Table 5.10: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers generally experience more isolation than non-teleworkers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	1	4
Agree	4	4
Neither	3	2
Disagree	6	1
Strongly disagree	2	0
Totals	16	11

**Table 5.11: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers miss out on the social aspects of work.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	0	4
Agree	3	1
Neither	3	2
Disagree	9	3
Strongly disagree	1	1
Totals	16	11

**Table 5.12: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have more flexibility in arranging non-work-related schedules.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	4	5
Agree	5	4
Neither	3	1
Disagree	3	0
Strongly disagree	1	1
Totals	16	11

**Table 5.13: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have more flexibility in arranging work-related schedules.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	3	3
Agree	6	3
Neither	3	2
Disagree	3	0
Strongly disagree	1	3
Totals	16	11

**Table 5.14: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers can manage time more effectively than non-teleworkers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	1	1
Agree	9	4
Neither	3	5
Disagree	2	0
Strongly disagree	1	1
Totals	16	11

**Table 5.15: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers can accommodate family responsibilities more easily than office-based workers.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	1
Strongly agree	4	3
Agree	5	5
Neither	3	2
Disagree	3	0
Strongly disagree	1	0
Totals	16	11

**Table 5.16: Comparison of teleworker and non-teleworker replies to the statement:  
For teleworkers, work spills into their personal lives.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	1	3
Agree	3	4
Neither	1	2
Disagree	7	1
Strongly disagree	4	1
Totals	16	11

**Table 5.17: Comparison of teleworker and non-teleworker replies to the statement:  
For teleworkers, it is more difficult to cut off from personal worries at work.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	0	1
Agree	1	4
Neither	3	4
Disagree	7	0
Strongly disagree	5	2
Totals	16	11

**Table 5.18: Comparison of teleworker and line manager replies to the statement:  
Telework allows line managers to assign projects outside of traditional office-based  
hours.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	2	0
Strongly agree	0	0
Agree	1	0
Neither	4	4
Disagree	8	4
Strongly disagree	1	2
Totals	16	10

**Table 5.19: Comparison of teleworker and line manager replies to the statement: Telework interrupts projects for my line manager.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	1	0
Strongly agree	0	0
Agree	0	1
Neither	4	0
Disagree	8	8
Strongly disagree	3	1
Totals	16	10

**Table 5.20: Line manager replies to the statement: Delegating work to teleworkers is more difficult than to office-based workers.**

	<i>Frequency LM</i>
Not answered	0
Strongly agree	0
Agree	0
Neither	3
Disagree	5
Strongly disagree	2
Totals	10

**Table 5.21: Comparison of teleworker and line manager replies to the statement: Telework allows managers to avoid personnel conflicts in the office (e.g., separating employees).**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	2	1
Strongly agree	0	0
Agree	2	1
Neither	8	4
Disagree	4	4
Strongly disagree	0	0
Totals	16	10



**Table 5.22: Comparison of teleworker and line manager replies to the statement: It is more difficult to supervise teleworkers than office-based workers for my line manager.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	1	1
Agree	0	1
Neither	5	2
Disagree	7	5
Strongly disagree	3	1
Totals	16	10

**Table 5.23: Comparison of teleworker and line manager replies to the statement: There is less personal communication with teleworkers versus office-based workers for my line manager.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	0	0
Agree	5	3
Neither	3	2
Disagree	7	3
Strongly disagree	1	2
Totals	16	10

**Table 5.24: Comparison of teleworker and line manager replies to the statement: There are more difficulties managing teleworkers due to less visual contact versus office-based workers.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	0	1
Agree	2	0
Neither	1	2
Disagree	10	6
Strongly disagree	3	1
Totals	16	10

**Table 5.25: Comparison of teleworker and line manager replies to the statement: Teleworker performance is more difficult to manage versus office-based workers for my line manager.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	0	0
Agree	0	1
Neither	6	1
Disagree	6	6
Strongly disagree	4	2
Totals	16	10

**Table 5.26: Comparison of teleworker and line manager replies to the statement: Telework allows to more closely measure performance for line managers.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	0	0
Strongly agree	0	0
Agree	5	2
Neither	8	6
Disagree	3	0
Strongly disagree	0	2
Totals	16	10

**Table 5.27: Comparison of teleworker and line manager replies to the statement: Telework means less motivated staff for my line manager.**

	<i>Frequency TW</i>	<i>Frequency LM</i>
Not answered	1	0
Strongly agree	0	0
Agree	0	0
Neither	6	2
Disagree	5	6
Strongly disagree	4	2
Totals	16	10

**Table 6.1: Do you have a dedicated work space at home?**

	<i>Whole room</i>	<i>Part of a room</i>	<i>NA</i>
Teleworkers	4	6	6

	<i>Yes</i>	<i>No</i>	<i>NA</i>
Does it fulfil your needs?	10	0	6

**Table 6.2: Comparison of teleworker and non-teleworker replies to the statement: It is harder for teleworkers to keep up with new developments.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	2	3
Strongly agree	0	0
Agree	1	2
Neither	2	0
Disagree	4	2
Strongly disagree	7	4
Totals	16	11

**Table 6.3: Comparison of teleworker and non-teleworker replies to the statement: It is harder for teleworkers to find out what is going on in the department.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	1
Strongly agree	2	2
Agree	4	4
Neither	3	1
Disagree	6	2
Strongly disagree	1	1
Totals	16	11

**Table 6.4: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have less stress.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	1
Strongly agree	9	2
Agree	5	3
Neither	1	3
Disagree	1	2
Strongly disagree	0	0
Totals	16	11

**Table 6.5: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers experience fewer health-related problems due to work.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	1
Strongly agree	4	1
Agree	5	4
Neither	6	3
Disagree	0	1
Strongly disagree	1	1
Totals	16	11

**Table 6.6: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers have fewer interruptions at work.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	2
Strongly agree	9	3
Agree	7	5
Neither	0	0
Disagree	0	1
Strongly disagree	0	0
Totals	16	11

**Table 6.7: Comparison of teleworker and non-teleworker replies to the statement: Teleworkers feel more in control.**

	<i>Frequency TW</i>	<i>Frequency NTW</i>
Not answered	0	0
Strongly agree	2	2
Agree	6	2
Neither	6	3
Disagree	1	4
Strongly disagree	1	0
Totals	16	11

**Table 6.8: Taking everything into account, has the telework programme met your expectations?**

	<i>Yes</i>	<i>No</i>	<i>Not answered</i>
Teleworkers	16	0	0
Line managers	10	0	0

**Table 6.9: Do your teleworkers do the same jobs as office-based workers?**

	<i>Yes</i>	<i>No</i>	<i>Not answered</i>
Line managers	9	1	0

## **Appendix 12: Replies to open-ended questions**

In this appendix, all replies have been amended, when necessary, to protect the identities of study participants. Respondents in this appendix are identified by participant number (e.g., respondent one is written as 'R1'). Each question (from questionnaires) is followed by qualitative replies in numerical order. When there was no answer from a respondent, 'NA' is written in the place of a reply. Replies in this appendix have been translated into English from the original French.

### **Teleworker qualitative replies from questionnaires**

#### ***14 Are you under pressure to work extra hours in your current position?***

R1  
No

R2  
No

R3  
No

R4  
Yes, too much work

R5  
No

R6  
No

R7  
No

R8  
No

R9  
No

R10  
No

R11  
No

R12  
Yes, my manager feels I am at their disposal

R13

No

R14

No

R15

No

R16

Yes, when there is urgent work

***15 Why did you choose to take part in the telework programme study?***

R1

To drive less, to gain time up to one more day per week, better quality of life. I remain very flexible, if I had the chance to change my schedule to a three day week, I would, but only if work activity were lower. More time with the family, being less tired and fewer travel related expenses

R2

Fatigue due to travel. Ease to organise family and personal life. Wanted to put more challenge on myself by breaking the same rhythm. I have been able to make a chart to visualise CO2 savings due to less commuting by car. I have gained time for life, rather than spending that time travelling. It has been quite easy to telework since the beginning. IT people are used to it, as it is in our culture. Three times I have had to change my telework schedule in order to participate in meetings

R3

Innovative experience, to improve living conditions, less transportation time, less stress

R4

Less travel time, to try out a new way of work organisation

R5

To reduce travel time between home and work

R6

To experience another way of working, change environment, meet new colleagues, be autonomous, put new work habits into practice

R7

Interesting experiment, less transportation time and less fatigue

R8

Because my home is far from the workplace. My job allows me to telework

R9

Get rid of 2.5 hours of transportation time per day

R10

Financial independence because of less transportation. Less stress at work

R11

To limit commutes from home to work

R12

Because I live 60 kilometers away from work. Because I am handicapped. I hope to feel less pressure whilst at work, and be able to get away from it

R13

Work flexibility which allows me to better manage tasks, my workload work organisation and travel. It also allows me to better manage health-related issues. A better management of my personal life

R14

To have more comfort, for certain tasks that can be done just as well at home as at the office. To receive a cell phone and laptop for work; refused if you do not telework

R15

Participation in sustainable development on my level. Lower transportation costs. More comfort in my life and more adapted to my handicap. Interesting experiment, brings more dynamics to work

R16

Less distance between home and work – 240 kilometers! Available for family, interested in participating in telework, flexibility in managing work and organising work

***16 Taking everything into account, has the telework programme met your expectations?***

R1

Yes. working part-time is not a choice. As I have a small child, I was refused to not work on Wednesdays. On the road to my workplace, as it is touristic, there is an enormous amount of traffic. I have only found advantages

R2

Yes. Time for 'life' is a gain. Less stress. Financial gains. Impression of being more eco-responsible. Almost all teleworkers I know appear to be satisfied. Two days per week, maximum three days, could be better, according to the job as people could have more flexibility. Line managers feel they (teleworkers) need to be more present – culturally workers feel they need to be seen and loyalty is built through visual contact. Managers are shocked when workers are not available. Otherwise, other workers want to telework too. With jealousy, although it is still in the pilot phase, initial study result showed that 950 people working here want to participate in the telework programme. A lot of people are interested but we should see which workers should participate. Teleworkers are not always good workers. There is an emphasis on the personal character of teleworkers and their job. Important traits for teleworkers are the ability to dialogue, mental capacity, being able to work at a distance, family situation, means of



transportation. All of the teleworkers I know are at home, although could be possibilities to explore (more in telecentres)

R3

Yes. Telework is not a barrier to the progression of my work. Furthermore, I can better manage professional and private lives

R4

Yes, less fatigue due to transportation, higher levels of concentration, better organisation

R5

No

R6

Yes, with the liberty to organise and manage time

R7

Yes, better, interesting work organisation method, less fatigue at the end of the week

R8

Yes, tasks that were done before without telework were carried out within the same time limits, with another type of work organisation

R9

Yes, adaption of telework with my job. More time with my family. Less fatigue

R10

Yes. Well-being and serenity. Easy adaptation between private and professional life at home

R11

Yes. Gain in time, less fatigue and stress (driving in winter). I need more calm to work better

R12

Yes, less fatigue and less stress

R13

Yes, better working conditions. Fewer commutes. More rational organisation

R14

Yes, a small improvement in my quality of life

R15

Yes, improved my living conditions, well-being, using transportation time for other activities, reducing CO2 in the air, rethinking organisation of work, less stress and less aggressivity in the workplace – it is a sensitive type of job between the director and personnel

R16

Yes, better work organisation, less fatigue, more motivation

*21 Do you have a dedicated work space at home? If so, does it fulfill your needs? If not, why?*

R1  
No

R2  
Part of a room. Yes I have space at home because I need to spend some time working there. Most of the time I spend in the telecentre where I am the only worker there

R3  
No, because I am in a telecentre

R4  
NA

R5  
NA

R6  
NA

R7  
NA

R8  
Yes, a room

R9  
Yes, part of a room

R10  
Yes, a room

R11  
Yes, a room, this room meets my needs

R12  
Yes, part of a room. There are large rooms at home – when I am alone I am not interrupted

R13  
Yes, part of a room. This space fills my needs. But I also work in another room or in the garden, depending on time, my desires and what I need to do

R14  
Yes, part of a room. Yes

R15  
Yes, office adapted, shared with teenage son, 16 years – rules of the home office were explained at the beginning. I still need a small printer

R16

Yes, share office with spouse, well-defined work spaces

***23 What differences do you feel there are between teleworkers and office-based workers?***

R1

If I take part in a meeting I always agree to modify my teleworking days. I am the only one to do my work in the department. In case I am absent, no one takes care of business. Whether I am at the office or not has no impact on my colleagues. My colleagues and I do not do the same work. It is therefore difficult to compare

R2

The only difference is perhaps in the sense that there is jealousy (or unfairness?) since I have been teleworking for almost one year, many colleagues want to do the same

R3

Differences in the relationships with my colleagues (more communication). Non-teleworkers are more in touch with what is happening in the office

R4

I have less informal exchange since I telework. My professional activities are more 'programmed.' I plan certain types of work when I telework, also when I am in the office, so that my work is separated, the work I do at home and the work I do in the office. It is especially true in terms of meeting with the public or colleagues. Depending on circumstances, social life in the office is eased, constraints or conflicts are easier to handle at a distance, but sometimes more difficult to solve problems without the contact of colleagues

R5

No real difference between teleworkers and non-teleworkers in professional terms

R6

Informal communication at work is reduced, personal relationships affected by the distance

R7

No difference

R8

No physical presence in the office during the two days teleworked

R9

None. Only access to paper documents which are in my office

R10

NA

R11

No negative difference that is felt, except for an admiration for the teleworker – and asking the question 'how can I telework?'

R12

People at the office are aware of office life and services

R13

In my job, there are no differences (between teleworkers and non-teleworkers). However, I need work tools more adapted to this job, done on a mobile basis – laptop computer and cell phone allow me to take care of requests wherever I am located (whilst teleworking but also whilst at meetings outside of the office)

R14

Little difference because my mission as well as those of my colleagues involves a lot of travel and outside meetings, whether one teleworks or not

R15

Differences in ways of communicating, it becomes more technical. However, when dealing with social issues, we are dealing with humans and non-verbal communication is also important

R16

NA

***25 What are the main advantages of teleworking? Can you give examples?***

R1

I am not constantly interrupted by others. I am able to concentrate better. There is an undeniable increase in productivity

R2

Significant ‘conciliation’ is possible between professional obligations and family life. Telework allows better organisation and anticipation of work. Certain financial advantages. Eco-responsibility, financial gains, more time, better family life, better work-life balance, more flexibility, less stress, more relaxed. Do not miss out on personal activities, with IT interface good connection

R3

Better concentration for work. Less fatigue than a non teleworker since travel distance is shorter

R4

Less transportation time: less fatigue. Work is less ‘micro managed’. Easier to be reached by telephone

R5

Less travel time with less fatigue, possibility to organise time at work in an optimal way

R6

Gain in time, two hours per week, being independent and the freedom to organise work tasks

R7  
NA

R8  
Less fatigue and less fuel consumption for the car

R9  
Less fatigue, less stress

R10  
NA

R11  
I work better, am more productive and less interrupted. Less fatigue because of transportation between home and work which allows me to be more calm at work. The obligation to be more methodical and allows me to work better (work tasks are more easily planned), teleworking days break monotony

R12  
More concentration to write. Less fatigue

R13  
Ease in work organisation and independence. Trust and responsibility. Better time management and 'border' between private and professional lives (I can spread my working time to go to a doctor's appointment, for example. Not using a day of paid leave) reduces commutes, increases financial gain, less fatigue, less risks and less effect on the environment

R14  
Calm to concentrate on tasks, to think and to write

R15  
Higher levels of concentration for written documents: examples are writing and verifying of the telephone directory of the territory (more than 130 people). More liberty to organise

R16  
Less pollution, less stress, more reflection on work

***25 What are the main disadvantages? Can you give examples?***

R1  
You must be very organised and know how to plan your week. I try to make certain I have the right documents with me, if I forget something, I have to put the work off until the following day (when I go to the office). To participate in an office social event, I change my teleworking day in order to be there

R2  
You can be 'cut off' from the team. You may feel that since you telework you need to work more. For certain people it can be difficult to manage loneliness. One needs more rigour, more organisation skills, printers could be better – away from the office one

doesn't print everything since printers are not as powerful. Not everyone is apt to telework as the need for self-discipline is high. Difficult to explain to people that although one is at home, one is working. A lot of big decisions take place at the 'café' (in social circumstances) – during work/social time at the office. Need follow-up so that teleworkers are at ease. There is a lack of informal contact for teleworkers

R3

Being away from the department means that I am less in the 'spirit' of the department

R4

A slight lack of IT knowledge can lead to a great loss of time. Little time for unforeseen events, when one does not have a folder or documents which are needed, everything needs to be excessively anticipated. Participation in office life is less spontaneous. The office in the telecentre needs to be adapted to telework: notably confidentiality

R5

In my job, it is difficult to respect two fixed days per week, because of constraints, urgent appointments, meetings

R6

Rigorous organisation, planning work tasks, a more sharpened sense of duty can bring stress

R7

When the secretary's office is on holiday, I have to go to the office to take care of the tasks of the person who is absent (normally)

R8

Not being able to print, not having documents on hand if they are needed

R9

NA

R10

Being less 'in the know' in terms of what happens at the office (people on holiday, absences and people not at work)

R11

One disadvantage is to bring the box of files home, which is often heavy

R12

When printers, scanners are unavailable or when one has to travel to another location urgently, or react to an urgent letter, I am slowed down by telework

R13

Risk of isolation. Risk to lose contact with the life of the department (illness of a colleague, teamwork aspects). Necessity to adapt my job, tasks and objectives, knowing that independence can also be a disadvantage

R14

Technical problems linked to defective communication networks (VPN)

R15

Difficult to accept telework by colleagues, fear, jealousy for this alternative way of organising work – it is an innovative and recent method of work. Because of physical absence, it can be a way of being excluded – less presence in teams

R16

Not easy to stick to hours – work more than initially planned (when working at home)

***28 How does telework impact work flexibility and work/life balance?***

R1

I can finally go to pick up my son at school and participate in some of his school events. Something else made an impression on me – my son is five years old and before I was able to telework he talked to me about his work in the school garden. I had told him that I had not see what he had done there. Naturally he replied to me “of course, it is always dark when you take me to school,” which is true since I had to leave him at childcare at 7.30am. Telework has allowed me to drive him a bit later in the morning, but more importantly to pick him up earlier in the evening two days a week. That is happiness...

R2

For me telework is a way of organising work which favours the balance between personal and professional life. However, the main danger is when this great flexibility to work could break this balance

R3

Since I am able to modify my working time, I can better manager my personal life

R4

Telework in the telecentre does not allow flexibility, but rather a gain in terms of transportation time between home and work, which, personally is particularly pleasant

R5

NA

R6

By working in a telecentre, time gained from less transportation allows for better personal time management without having to take away from my personal space, my private space

R7

NA

R8

Easier to make appointments after telework is done since there is no travel time

R9

NA

R10

NA

R11

Time gained by telework is time gained for personal life

R12

NA

R13

Less fatigue and more time available for personal life. Less stress and better management of this. Easier to organise and bring together professional and private lives

R14

Improvement in life conditions – personal and professional

R15

Easier work organisation which makes it easier to manager personal and professional life, in a context where family life is becoming more importante. A different view of work in changing society. Telework is a tool to provide flexibility between private life and work life

R16

Better work-life balance, easier to manage time between private life and professional life

***30 What personal characteristics are important for you as a teleworker?***

R1

Being organised, to be able to communicate. Able to report on work one does

R2

Organised, have the trust of one's manager. Motivated

R3

Organised, independent, being able to solve problems alone when they arise

R4

Being able to plan one's work and adapt days teleworked to department needs

R5

NA

R6

Motivation, organisation, trustworthy relationships with managers and need to communicate information

R7

NA

R8

Organised, like working alone, be independent



R9  
Independent, rigour

R10  
Being able to separate professional and private life

R11  
You have to be methodical: a workday spent teleworking needs to be prepared. You have to know how to like working alone and not be afraid of responsibilities to take care of urgent tasks

R12  
NA

R13  
Independence. Being responsible. Knowing one's own working rhythm. Knowing how to manage time and workload. Not being afraid to work alone. Knowing how to separate tasks that can be done alone and those that need to be done with the help of colleagues

R14  
Able to organise one's work independently

R15  
To adapt to change, good IT knowledge, trust with hierarchy, organised, being able to plan, to listen good communication, to work alone, higher levels of concentration

R16  
To be able to work in another context. To be able to manage priorities, autodiscipline

### ***32 What technical issues affect telework?***

R1  
Being at a distance from Quimper, the computer at my disposal takes a while to connect

R2  
NA

R3  
Weaker internet connection away from the office. Difficult to load certain documents and connect to the network

R4  
Being able to bring 'confidential' documents from one place to another

R5  
NA

R6  
Paper filing, documents that need to be sent for signature

R7

NA

R8

It is necessary to have high speed internet

R9

To have a space with ability to pick up cell phone calls and high speed internet

R10

NA

R11

In case of technical problems, the maintenance department is always there to help us out – the same as in the office

R12

Slow network connection, my personal internet connection is used for telework, no IT technician from the CGF has come to my home to check my IT installation

R13

Access to social software – for work, which makes me wait to give certain replies, but it can be done with organisation

R14

Defective IT connections - not being able to be resolved by the IT assistance from my employer

R15

Without a reliable internet connection, telework is impossible. Need to be able to be assisted at home by an IT hotline

R16

Since I do not have IT access as an ‘administrator’, I have to contact the IT hotline for all technical questions (as in the office in Quimper)

***34 What are the advantages of managing teleworkers from your perspective?***

R1

If I am called where I telework, I am always available. My manager and I call each other almost systematically at 8:00am to talk about work in progress. At this time, we know that we are not bothered to talk. When I am in Quimper, we are often bothered and when people see that we are talking, they have to leave us and let us continue to talk

R2

Gain in office space when offices are shared, parking. Better planning of tasks and more in depth work follow-up

R3

Better availability and better work organisation

R4  
NA

R5  
Reciprocal trust, 'quality' communication

R6  
NA

R7  
NA

R8  
The experiment allows to evaluate if telework can be spread or not

R9  
NA

R10  
NA

R11  
NA

R12  
NA

R13  
More efficiency in work done. Probably more personal investment. Fewer illness-related absences. Less commutes by personnel

R14  
This could allow the employer to save money on offices, which are empty. The experiment improves the image of the employer in terms of external and internal communication

R15  
Lower management costs, less space used in the office, (telework) makes managers reflect on work organisation, could be a solution when there is office conflict

R16  
NA

***36 What are the disadvantages of managing teleworkers from your perspective?***

R1  
We have to find time slots when I am not teleworking in order to book meetings. If it is not possible, I change the day I telework

R2

'Classic' management style needs to be adapted. Difficulty to find the right level (how many) teleworkers in a department

R3

None in my view

R4

Higher percentage of teleworkers can make communication more difficult in a team

R5

NA

R6

Transmitting information

R7

NA

R8

Absence of physical presence. Implementing telework requires a lot of minutes-taking

R9

None

R10

NA

R11

I think that there are no more disadvantages when I am in the office

R12

NA

R13

Less presence in the office requires the line manager to organise work more. It changes the relationships amongst professionals which requires them to change their ways of communication and the way they work together

R14

Some line manager who have trouble trusting employees and delegating – general feeling of insecurity

R15

Need to plan and to be informed

R16

Telework is a way of working that relies on a trust between the teleworker and line manager

**38 What impact does telework have on individual productivity from your perspective?**

R1

If the work is not done, it is noticeable, if one is at the office or not. I am more calm to write letters, memos and minutes, important things that should be done calmly – I do them when I telework. Other things I do in the office in Quimper

R2

It depends on the individual, but generally, a motivated teleworker can reply just as quickly as non-teleworkers to carry out work asked by one's manager, who is located away from him/her (from my personal experience)

R3

Teleworkers do not work more, but rather better. They are more efficient since they are less interrupted and more concentrated

R4

None

R5

Greater responsibility for the teleworker

R6

Increased individual productivity, one work methods are put into question

R7

NA

R8

Certain tasks require more IT manipulations (eg printing at work at not at home)

R9

Not interrupted as often

R10

NA

R11

I work better when I telework because I am less interrupted and calm

R12

I am more concentrated when I am alone. I can advance more quickly and without stress

R13

I work better when I telework because I can organise work according to how I feel. However, tasks have to be defined and the capacity of each person to perform these tasks alone must be measured

R14

No impact from my personal experience

R15

Higher productivity because of better concentration. Fewer interruptions, higher work quality

R16

Individual productivity for teleworkers is easier to analyse and to quantify

***40 Has telework affected your likelihood of staying at your organisation?***

R1

Not concerning the employer, but rather the department. I wanted to change jobs at the organisation, but with telework in place, I would rather keep this advantage, linked to my current job

R2

Not personally. however, it (telework) is an additional benefit for the community/organisation to retain people who otherwise would look for work elsewhere

R3

I will no apply to a job that does not allow me to telework

R4

No

R5

No

R6

Not really since I am at the end of my career

R7

No

R8

No

R9

Yes

R10

Yes

R11

NA

R12

Yes

R13

Yes. It is also an element that will be important for me if I look for another job at the CGF or in another department

R14

No

R15

Extremely. It can be important to think about when changing jobs, could be interesting if the organisation extended telework to other jobs

R16

Higher levels of motivation and interest for work to be done

**Non-teleworker qualitative replies from questionnaires**

***13 Are you under pressure to work extra hours in your current position?***

R1

No

R2

No

R3

NA

R4

No

R5

No

R6

No

R7

No

R8

No

R9

No

R10

No

R11

No

***14 What are your experiences working with teleworkers in the telework programme?***

R1

No influence on my own work. If the teleworker needs to be seen in person, we can wait until they are in the office. We are not used to phoning them (teleworkers) or sending an email

R2

Only one experience with one colleague

R3

NA

R4

Another way of working and communicating: putting tools in place

R5

NA

R6

Being an assistant, we both work together to organise appointments and meetings for our respective line managers

R7

I am less able information to line managers and colleagues, which brings 'surprises' and misunderstanding

R8

NA

R9

NA

R10

NA

R11

In Lesneven I have worked with one teleworker for several months

***20 What differences do you feel there are between teleworkers and office-based workers?***

R1

Teleworkers have less pressure

R2

There are not any

R3

NA



R4  
NA

R5  
NA

R6  
NA

R7  
Place of work and communication, differences are different according to the relationship with line manager, work being done, work organisation...

R8 NA

R9  
NA

R10  
NA

R11  
Need to better follow up on on-going projects and urgent matters, contact and share information, being able to consult documents which are archived

***22 What are the main advantages of teleworking, from the perspective of a non-teleworking colleague? Can you give examples?***

R1  
Teleworkers work faster at home because of less commuting. It is easier to organise, teleworkers are not interrupted by people coming into the office

R2  
Less commuting, less fatigue, being able to organise one's work time as one wishes

R3  
Improvement of family life, another point of view of how things function in the department, we are then forced to ask ourselves questions in terms of our procedures

R4  
Fewer kilometres to commute, the teleworker is not interrupted as often as colleagues in the office and by clients, higher availability to follow up on work

R5  
NA

R6  
Less commuting, less stress from commutes and lower transportation costs. The teleworker has health issues and is certainly less tired and feels better

R7

Gain in time, lower costs (no transportation cost), less stress from commuting, work organisation flexibility and being able to concentrate better

R8

Less stress

R9

Less stress, tension from work, more calm to do tasks which require concentration

R10

Less travel time, positive aspect for family life

R11

Less commuting, calm

***22 What are the main disadvantages, from the perspective of a non-teleworking colleague? Can you give examples?***

R1

To plan work to be done at home for one or two days in advance. To print documents and to make photocopies and put things into files. Losing time – at work we can take documents, work on them and then file right away. We lose less time

R2

Teleworkers are alone, always having to balance between work and personal life

R3

Some minimal difficulties (being reached by telephone)

R4

Less contact with colleagues

R5

NA

R6

Disadvantages – I do not really see any except that adaptation is necessary for everyone – stress from work and demands from line managers is significant

R7

More difficult communication, isolation

R8

Less communication with colleagues

R9

Distance away from the workplace, less direct contact with colleagues, more blurred boundary between work time and other things

R10

Difficulty for colleagues to be able to know when the teleworker is available – phone calls are taken by office-based colleagues, documents for work in progress may not be available for the teleworker

R11

Isolation, lack of contact with colleagues

***25 How does telework impact work flexibility and work/life balance, from the perspective of a non-teleworking colleague?***

R1

NA

R2

Telework allows flexibility

R3

We need to invent a new way of organising work

R4

If a teleworker is at home, it is easier to manage daily family life (bringing children to school); making appointments during the day, whilst keeping up with professional obligations

R5

NA

R6

Risk of difficulty to separate personal and professional life, rigour is necessary in order to not be overwhelmed. I would not be able to telework, I do not wish to but I think it is a good thing for those who volunteer

R7

Less stress

R8

NA

R9

More interference between work life and family life

R10

For telework in a telecentre, less commuting, more flexible hours

R11

A teleworker has to be more rigorous in their work, their hours – the risk is to become isolated from the team

***27 What personal characteristics are important for a teleworker, from the perspective of a non-teleworking colleague?***

R1

Independent, rigorous, organised, motivated, able to work alone

R2

NA

R3

Being able to adapt and to communicate. Being able to master IT tools used during telework

R4

Rigour, availability, organised

R5

NA

R6

Independence and organised

R7

Communication is important – strong communication between teleworker and non-teleworking colleague, a presentation by the line manager is given to teleworkers and non teleworkers was given to understand the telework situation, better cooperate and be able to continue to work in a team. To spread out work tasks evenly, to avoid isolation and to plan meetings

R8

NA

R9

Being able to work alone and high level of organisation

R10

Independence to do work, to be able to work on a project from A to Z

R11

Being able to adapt to different workplaces

***29 What technical issues affect telework, from the perspective of a non-teleworking colleague?***

R1

Printing and making photocopies that can only be done at the office

R2

The department we are in has a small number of staff, given that there is one teleworker means that workers in the office are often solicited on the phone

R3

Teleworkers at home has less office space and need to have reliable IT tools. In the telecentre colleagues need to be able to assist them there

R4

Difficult to reach the teleworker when IT system are down

R5

NA

R6

Slow IT connections

R7

IT maintenance, plan to have extra material is there is a breakdown, to save time. They may not have all tools such as fax

R8

NA

R9

Internet connection problems

R10

Access to paper documents, working hours of teleworkers not known to office-based colleagues

R11

IT breakdowns

### **Line manager qualitative replies from questionnaires**

***12 Is your teleworker under pressure to work extra hours in his/her current position?***

R1

No

R2

No

R3

No

R4

No

R5

No

R6

No

R7

No

R8

No

R9

No

R10

No

***13 Why did you choose to take part in the telework programme study, as a line manager?***

R1

The principle appeared interesting to me, knowing that I would participate in an experiment

R2

For the well-being of the teleworker

R3

To experiment with another type of work relationship, to achieve greater work-life balance for teleworker

R4

A way of working that facilitates well-being at work

R5

To facilitate their personal life (home far away), to explore new methods of working

R6

I manage a department in a rural part of the region where distances are significant, staff spend approximately 20% of their time commuting which generates fatigue and expenses for staff and for the department, and to reduce CO2 emissions

R7

I appreciate implementing a different work method which allows staff to be motivated and to provide them a daily improvement in life

R8

Interest in the experiment

R9

On the demand of the teleworker

R10

Because it (telework) appears to be pertinent to me in terms of the benefits for work-life, working environment, well-being at work, as well as in terms of management and the organisation of my department

***14 On what criteria did you choose teleworkers?***

R1

I did not choose them

R2

NA

R3

Distance from home to work

R4

NA

R5

Volunteer, home far away from the workplace, trust

R6

People who live far away from their workplace

R7

I was not present when the telework was chosen, however upon my arrival I had to plan and implement this work method

R8

I did not choose the teleworker, the person asked and I approved

R9

The teleworker volunteered

R10

Geographical distance from place of work, staff member is handicapped

***15 Is it more difficult to assess the performance of teleworkers compared to office-based workers? If yes, how?***

R1

No, it is important to previously define what is expected of the teleworker before starting to telework

R2

No

R3

No, to evaluate performance is always complicated, for the teleworkers it is absolutely necessary

R4

No

R5  
No

R6  
No

R7  
No

R8  
No

R9  
No

R10  
No

***17 Do your teleworkers do the same jobs as office-based workers? If no, how are they different?***

R1  
Yes

R2  
Yes

R3  
Yes

R4  
Yes

R5  
Yes

R6  
Yes

R7  
No

R8  
Yes

R9  
Yes

R10  
Yes



***18 Do you have problems communicating with teleworkers compared with office-based workers? If yes, please give examples***

R1  
No

R2  
No. Nevertheless, I could add that in case of the absence of non-teleworkers (holiday, illness) the absence of the teleworker creates a nuisance to be able to be physically present to meet people

R3  
No, no problem thanks to cell phone and laptop

R4  
No

R5  
No

R6  
No

R7  
No

R8  
No

R9  
No

R10  
No

***19 Is teamwork an important aspect of jobs in your department? If yes, does telework affect this in any way?***

R1  
Yes, it requires to define tasks for each employee so that there is nothing overlooked

R2  
Yes, I haven't noticed a particular effect linked to telework

R3  
Yes, yes

R4  
Yes, no

R5

Yes, the time to co-ordinate and to meet have to be completely formalised

R6

Yes, telework has not had an effect on teamwork, staff who telework wanted to adapt their teleworking days according to meetings times, they have a cell phone and a laptop computer connected to internal email, they can therefore be reached by their colleagues or can reach their colleagues easily

R7

Yes, work can be done with colleagues even if a member of the team is a teleworker

R8

Yes, no telework has no effect on teamwork if you retain flexibility to organise during days teleworked

R9

Yes, teleworker is less present for daily tasks

R10

Yes, I do not think so. There is jealousy, however, because this work method is very much desired in the department, but only authorised for one person at present

***20 Taking everything into account, has the telework programme met your expectations? Please explain why***

R1

Yes and no, I think that the expansion of the telework programme depends more particularly on the desires of teleworkers, it has not improved the activities in my department

R2

Yes. The teleworkers if less stressed and less tired

R3

Comfort in life, more attention paid to objectives and results, more attention paid to communication

R4

NA

R5

Yes, it brings together the desires of the worker and those of the department, without penalising other workers

R6

Yes. Staff are not as tired and less stressed, less expense for fuel, lower CO2 emissions, teleworkers are more productive at home due to less stress

R7

Yes, the teleworker takes care of tasks whether they are done at the office or elsewhere. This capacity to telework clearly shows the skills of this staff member in terms of good management of tasks and anticipating work

R8

Yes, but I did not have any particular expectations except to be able to give my agreement to allow the teleworker to limit road kilometres and benefit from the financial gain

R9

Yes

R10

Telework is a novel method which requires me to revisit how to manage people (intellectual interest), which develops the autonomy of the staff member (quality not very much developed in administrative functions in general), and working by objectives

***24 What are the advantages of managing teleworkers from the perspective of a line manager?***

R1

It requires me to make clearer work objectives

R2

NA

R3

More involvement from the teleworker

R4

Better work organisation, definition of objectives

R5

Great clarity of objectives, the means used, everything is documented

R6

Staff less stressed and less tired, more available and more relaxed

R7

Deeper professional relationship with teleworker, organisation of work reflected upon and defined together

R8

NA

R9

Advantages are largely for the teleworker, he drives less, has increased personal time and less commuting-related costs

R10

Already answered in question 20

***26 What are the disadvantages of managing teleworkers from the perspective of a line manager?***

R1

It is sometimes difficult to define objectives that are quantifiable, this makes it more difficult to evaluate performance

R2

When the teleworker is teleworking, being able to be present to meet people does not take place when their colleague is not there (welcome desk, secretariate)

R3

Cost of equipment

R4

NA

R5

There are not really when commitment from each party is clear, you need trust

R6

I can only see advantages, there are no disadvantages in terms of management when the contract is clear and objectives are fixed with a common agreement with the teleworker

R7

I do not see any

R8

NA

R9

NA

R10

NA

***28 What impact does telework have on individual productivity from the perspective of a line manager?***

R1

I do not have enough experience with telework to say so

R2

NA

R3

Rather improved

R4  
Greater efficiency

R5  
In my experience here, less fatigue because of transportation, necessity to better coordinate the time to share information in the team, you need to be clear in your objectives and be at ease to follow them up

R6  
Because of less stress and less fatigue, since staff are in their private space, productivity is higher, moreover they can plan work themselves

R7  
Work has to be more organised which implies higher productivity. The teleworker is not interrupted as often as other team members when they are teleworking, this is an advantage for her in terms of well-being and the ability to better manage their work

R8  
I do not think that there is an effect on productivity

R9  
There is no change for me – productivity is the same

R10  
When we improve the well-being of the employee we could imagine that we develop their enthusiasm and their ‘desire to take on projects, make suggestions, etc

***29 How do you measure the productivity of your staff?***

R1  
Evaluations are difficult for certain types of jobs – it is really a weakness which is exacerbated by telework

R2  
Good productivity

R3  
By objectives and by tasks

R4  
Respecting objectives

R5  
From agreed objectives, sharing the workload fairly amongst team members

R6  
From agreed objectives and weekly follow up on objectives

R7  
Work being done well and on time

R8

NA

R9

Setting annual objectives and then seeing if they are accomplished

R10

NA

***31 Has telework affected the likelihood of workers being attracted to and staying at your organisation, from our perspective as a line manager?***

R1

This has not been the case in my department

R2

NA

R3

I do not know

R4

NA

R5

It is a criterion amongst others, the experiment is finished here because the employee left the department (they live 150 kilometers away)

R6

For people who live far away from their workplaces, being able to benefit from telework means that they will not only apply for jobs close to their homes which avoids turnover, and in turn means higher quality of services provided

R7

Yes

R8

No, no influence

R9

Yes, it allows more comfort at work and personal organisation

R10

Maybe, but it is not a sufficient element to make it desirable to stay, it also depends on the manager, colleagues and the type of work