# New forms of employment ICT-based mobile work, Denmark 

Case study 28: Grontmij

For many employees in Denmark, fluid working hours and workplaces - so-called 'boundaryless work' or 'flexible work' - have become increasingly common. This case study is based on Grontmij, an international consulting and engineering company, where ICT-based mobile work is the norm, whether in temporary project offices, at the premises of clients, or at home.

## Introduction

For many employees in Denmark, fixed working hours and places are increasingly uncommon. This phenomenon has often been known as 'boundaryless work' or 'flexible work' and is characterised by:

- flexibility of when to work (as opposed to having fixed work hours);
- flexibility of where to work (like having the opportunity to work from home or other locations);
- flexibility of how the work is organised and performed.

A survey from 2012 on working conditions among Danish employees showed that $89 \%$ of employees often or very often have influence over how their work is organised. Knowledge workers in particular report having a high influence on how and when to perform their job (National Research Centre for the Working Environment in Denmark, 2014).
Mobile work took its first steps as 'home offices'. Mobile work was then and now closely connected to flexibility of time - when to work - and stationary workplaces at home offered the opportunity to be flexible about working hours.
Mobility has become more widespread since the 1990s and has been linked to developments in ICT, especially the use of cellular phones and the internet. These technologies have provided leverage for changing the time and place of work. For the purposes of this report, the term ICTbased mobile work will be considered equivalent to the terms flexible or boundaryless work.
This case study should be seen as typical of much of the labour market in Denmark. However, it draws a picture of a highly developed mobility that is directly connected to the nature of company services, which is also a common work situation for Danish employees. The case study shows that mobile work is firmly rooted in both employer and employee expectations, and many of the interviewees have never worked in any other way. Mobile work is not an innovative employment form in the Danish context.
The case study is based on Grontmij, an international company in the consulting and engineering industry. Here, ICT-based mobile work includes the opportunity to work from locations of choice such as at home, or in other fixed locations such as an office or temporary project offices. The case study on how mobile work is applied at Grontmij is based on:

- desk research on mobile work in Denmark;
- interviews with two external stakeholders, a manager and two employees.

One of the employees is a works council representative from Grontmij. The interviewees from Grontmij have all been working in the construction industry for over 10 years. The HR director was contacted for a factual check.

## General characteristics of Grontmij

In Denmark, Grontmij A/S is part of the Dutch Grontmij Group. In 2006, Grontmij bought the Danish consulting and engineering company Carl Bro. In 2007, Carl Bro changed its name to Grontmij A/S. Grontmij ranks among Europe's largest engineering consultancies and has a presence in the Netherlands, France, Denmark, Sweden, Belgium, the United Kingdom, Germany, Poland, Turkey, and China. Globally, Grontmij has 300 offices, and in 2010, the total turnover was $€ 922$ million.
Grontmij, established in 1915, is listed on the NYSE Euronext stock exchange. Its expertise is in energy, highways and roads, light rail, sustainable buildings, and water. The company's special competitive advantage is its leading principle of sustainability by design.
Grontmij employs about 7,000 employees internationally and about 1,000 employees in Denmark. In Denmark, Grontmij has 13 offices throughout the country, with the headquarters located in the city of Glostrup, near the capital of Denmark. Most of the employees have full-time contracts.
In accordance with the Danish Working Environment Act, Grontmij has established a work council of both employee and employer representatives to focus on improvements to the work environment. The overarching aim is to accommodate the work environment to fit different employees and their life situations. Grontmij thus has strategies and policies to promote an inclusive work environment, promote job retention, and ensure flexibility. The management evaluates the implementation and effects of these initiatives annually.
Examples of such initiatives include various possibilities for taking leave from work, accommodating senior staff, and flexible work arrangements such as working from home and doing part-time work. Whereas these arrangements cover all employees in the company, some target groups are employees from specific age groups or with physical or other disabilities. In this context, mobile work is part of the overall strategy of ensuring flexible work arrangements. No specific strategy has been developed for mobile work but mobile work arrangements, such as working from home or other locations, working while travelling or on other premises and working during non-office hours, are all seen as measures to meet the needs of different target groups.

## Design and implementation process

All of Grontmij's nearly 1,000 employees have technical opportunities to do mobile work. According to the HR director, the company does not gather information about the actual use of these opportunities and so Grontmij knows neither the share of employees doing mobile work nor the share of working hours done during mobile work. It is not known whether some employee groups use these opportunities more often than others. However, the company knows that more or less all employees do some mobile work, although in varying degrees. The introduction of ICT-based mobile work at Grontmij has been a gradual process that began over ten years ago. The first step was the opportunity to work from a stable workstation at home with the flexibility to exchange office hours with working at home and outside 'opening hours'. With the evolution of ICT, the possibilities of where employees could work from increased. Grontmij is thus very representative of businesses in Denmark, a country with a work culture that sees responsibilities delegated to employees based on trust.

The process was not pre-planned or structured, but followed a more general trend in the Danish labour market towards more flexible work arrangements. Thus, the interviewees in this case study do not remember when mobile work or flexible working conditions were first introduced in the company. The interviewees do not remember a time of fixed workplaces and report that working from home was not unusual even before they had their own cellular phones. This supports the notion that mobile work is not merely about technology but also part of a work culture and organisation.
Clearly, technological development, such as the introduction of cellular phones, broadband and easy access to the Internet, has made it possible to work from different locations. This permits Grontmij to establish temporary project offices near large construction projects. Employees might thus be moved to temporary offices for a fixed period of time to work alongside employees from other companies.
The widespread use of ICT-based mobile work at Grontmij might also be related to specific industry characteristics. The interviewees explained that the flexibility of mobile work was essential in the consulting and engineering industry. Bridges and houses are built far from the company office, and commuting times might form a significant part of the working hours when consultancy takes place on site. One of the interviewees explained that this has also resulted in a culture characterised by a high degree of self-management as well as the need to use ICT, especially cell phones. Work processes in 2014 are built on maximising efficiency, and this is further facilitated by ICT. Before these developments, commute times could serve for reading hard copy materials at best, while now they serve for all types of exchanges with clients. This includes the delivery of important documents which used to take a considerable time. Mobility is integrated into all processes, and the impact of mobile work cannot be isolated from any other kind of work, say the interviewees.
Finally, the interviewees also address mobile work as a means of balancing work and private life. Mobility is also connected and driven by the structure of family life and society in general. Given these conditions, there is a strong expectation that the company will offer ICT tools and a workplace culture that permits the employee to spend their working hours outside the company office.

## Work method, processes, and procedures

All employees in the Danish division of Grontmij have a company-issued laptop and cell phone, regardless of whether or not they are a knowledge worker. All employees have access to all company documents and programmes via a cloud solution. Moreover, some of the employees have a tablet if it is necessary for their specific tasks, such as when overseeing construction sites. All employees are able to work from all possible locations.
Employees do not own the equipment and must return it to the company when they move on to other jobs. Mobile work is a general working condition which is covered by the work council. There have been, it seems, no specific discussions about the impact of mobile work. Grontmij has an IT department of about 15 employees who oversee all the equipment and specialise in phones, computers, and other ICT technologies. This department also provides technical support to Grontmij employees.
When describing mobile work as a general method, working at home or during commute times are the common procedures used by most as a general means to get smooth work processes and to balance private life and work life.
When cooperating with a team of different internal and external players, it is not always possible or reasonable to establish project offices at the construction site. In such cases, the team meets but does not work out of the same premises. Employees typically work on several projects as members of different teams at the same time. In-house project offices are mainly used on larger and more complicated projects that make close internal collaboration of the company necessary.

The many different projects and combinations of teams require specific employees to travel frequently, and to be able to work from many different locations.

## Framework of mobile work

The framework is mainly informal and based on the work culture of the company and in Denmark in general.
The interviewees explain that their contracts make it clear they may be moved to another office. However, there are no formal rules about when and for what reason the employees might be placed, or whether by their own choice they will work from locations other than the fixed temporary office. The use of mobile work is typically based on informal agreements made between the employee and the line manager. Most staff have a general agreement that mobile work is an option, and just inform their manager and colleagues ahead of time before making use of it. This is, however, a very informal process that is not documented, therefore difficult to track. The informal characteristics are closely related to the work culture in Denmark that has limited use of control from the employer side. One of the employer representatives explains that employees are used to taking on a lot of responsibility and this includes having influence over how and when to work. Self-management is usually required by the employer from the employee. Monitoring is, however, also a part of the framework at Grontmij. As employees have to work for a specific number of hours as set out in their contracts, they register their working hours in 'Oracle', an online database management system, once a week. This information is primarily used for billing customers and keeping track of budgets. If an employee works more than the hours outlined in their contract, he or she is compensated either by hours off or through regular hourly pay. The interviewees explain that it can be a challenge to remember when they worked on what projects. If they are working on many different projects at one time, they need to register their hours on a daily basis. This is also a way for both the employee and the manager to keep track of the actual workload. The monitoring system does rely on information provided by the employees. Again trust is key.
The legal framework is the Danish act on working conditions which applies both to mobile work and to fixed workplaces. The act on working conditions has identified various locations where work is typically performed, together with some guidelines on how to comply with the regulatory demands. For example, it recommends that employees do not perform large writing tasks on laptops in trains or hotels, where the working conditions for ergonomically correct positions might not be ideal. Instead, the guidelines recommend that the employee, while 'on the run', should handle tasks such as reading, commenting, or phone meetings.
The fact that the above guidelines exist is testimony to the fact that mobile work is widespread in Denmark.

## External support

Grontmij designed and implemented their in-house mobile work organisation without any external support.

## Outcomes and effects

This section provides insight into outcomes and effects from the perspective of different interviewed stakeholders both at the micro and the macro levels. In short, the outcomes are centred around productivity and work-life balance.

## Work-life balance

At micro level, mobile work may be a measure to help balance demands from work life and private life. This must be seen in the context of the macro structures of businesses and the way of living in Denmark.
As mentioned, mobile work is particularly common among knowledge workers. A shift in the country's business structure from industry to knowledge work underlines the widespread use of mobile work.
Denmark is a country where two-income households are the common way of living. Many families find it difficult to meet demands from both private life and work life on a daily basis.
Work-life balance is thus a core element in the working conditions of Danish employees and is often discussed in terms of stress and other psychological consequences of working conditions.
Employees expect companies to offer the opportunity to change working hours in accordance with a person's private life. If a child needs to see the doctor or the school needs a chaperone for an excursion, the parent/employee can balance the demands from private life and work life.
A more overall perspective on these hands-on examples is that the employee is given considerable responsibility of self-organising his or her job. This exempts the employee from the usual control mechanisms of the employer. The employer may not know when or where work needs to be done and will generally limit its control mechanisms to allocating projects, their completion and their quality. In Grontmij, the employer has little to no knowledge of the employees' registered hours on a given project. The employer can only see whether the task is done and the quality of the delivered product.
The lack of control from the employer side also to some extent diminishes the employer's responsibility. An employee complaining about long working hours has to demonstrate that he or she has self-organised the job reasonably. Mobile work on the other hand, might stretch the working hours far into the employee's private life without any boundary. When mobile work makes you reachable at all times and in all places, emails may be answered during an excursion or at a wedding. The debate in Denmark on this aspect of mobile work is two-sided. Employees enjoy the flexibility to balance work and private life and the responsibility to self-organise, but while they also accept the downsides as inevitable, they increasingly see them as stressful.

## Productivity

Company productivity is highly influenced by working hours, which may be stretched as described. Productivity is higher but the wage bill remains constant. Moreover, the positive outcome on productivity is related to a smooth workflow where tasks are handled at all times, literally 24-7, and waiting time between different players inside or outside the company is reduced. The flexibility that comes with mobile work is unlike that associated with shift work since mobile workers are available at all times. This is more than someone being 'on duty' - it means that the specific qualification connected to a specific team member can be drawn on at all times.
ICT-based mobile work delivers a more efficient work process by using working hours rationally (drawing on specific competences exactly when needed in a project and leaving it for other projects when not) and by gathering teams of employees or partners around specific projects.

The most obvious benefit is the opportunity to create billable hours when the employee is travelling from one task to another. In the case of Grontmij, this is a significant benefit when consulting on many different and distant construction sites.
For Grontmij, the need to establish temporary project offices is a driver for mobile work. Higher productivity comes from gathering the core professions in the complex process of construction.

Mobile technology makes it possible for employees in project offices to have some connection to the usual home base while working out of a project office.
Mobile work thus also improves the company's ability to meet the client's needs in general, especially on urgent tasks and the need for meetings or on-site operations. Since mobile work is integrated into the general work culture in Denmark, this is not a strong competitive factor but it is a general expectation among clients and it can only be met by making the workplace as mobile and flexible as possible.
It also helps the company's competiveness in recruiting the best employees. Interviewed Grontmij representatives see mobile work organisation as the company's competitive advantage in attracting and maintaining the best professionals in the field.
Mobility, flexibility, and self-management are expected by knowledge workers. They enable the company to retain highly skilled employees with many years of experience when offering them a senior position that may include fewer fixed office hours.

## Strengths and weaknesses

Looking at the micro level, mobile work may be viewed as a 'win-win' situation, where both employees and company benefit. At the same time, both parties face risks and pitfalls. Several of the conditions pointed out by the interviewees show two sides of a coin.

## Employer perspective

From the employer's perspective, ICT-based mobile work has its strengths in its inherent efficiency for the company as described in the 'outcomes and effects' section. Mobility offers the employer great potential in meeting the client's needs by being on-site and establishing close cooperation between different players in the overall execution of a task. It reduces time wasted in travel.
However, this also reduces the time spent at the company's office, with colleagues as well as managers. Interviewees on both the employee side and the management side point out that the line manager of a highly mobile team needs to have a strong focus on the importance of knowledge-sharing and being part of a working community.
The employer must balance the needs of different teams - the short-term need for mobility to create an efficient process and a long-term need for knowledge-sharing. While a mobile team may be effective in the short term as a response to individual project needs, in the long term it may disconnect the internal relations and the knowledge-sharing in the company.
Grontmij is aware of this weakness. In the annual report of 2012, the company was explicit about its efforts to make optimal use of knowledge gains by using digital knowledge-sharing systems. The company has also established internal and external networks and forums where the employee knowledge is shared. But as mentioned initially, it all comes down to an assessment by the employer of balancing short and long term needs in the company.
The obvious risk from the employer's point of view is the lack of control when allowing employees to work outside regular time and space. Mobility may increase efficiency, but this is based on confidence in the employee's self-management skills. One way to address this is having employees register the hours spent both on individual work and on meetings or other team based work. This is the case in Grontmij, and is important for the consulting area of its business where tasks are sold by the hour.
Another risk is handing responsibility from managers to the employees. As mentioned previously, the employer's diminished control is balanced by the employees' increased responsibility to selfmanage. This is an employment relationship with a low level of control mechanisms on the employer side. On the issues of both time spent and specific problem solving, employers must accept less insight into everyday work if they are to benefit from the efficiency afforded by
mobile work arrangements. Interestingly, none of the interviewees mentioned lack of control as a weakness, which suggests that good self-management is an integral part of the work culture at Grontmij.
The general debate in Denmark is on 'boundaryless work' and its potential stresses. The argument is that employers get more hours and effort out of their employees by stretching out working hours and places. It is equally true that employers who are concerned about employee stress levels have less control and so have fewer means of reducing stress that may be a result of delegation of working hours management.

## Employee perspective

Interviewees said that ICT-based mobile work made it possible to work outside of office hours, reconcile work and family life and better meet clients' needs, and these factors increased their job satisfaction. They also mentioned a more practical strength, saying that being able to work outside the office often made it possible for them to focus and concentrate. This might be a particular advantage if employees would otherwise work in an open-plan office space with lots of phones ringing and people coming and going.
The clear benefits on the employee side are the various opportunities to balance work life and private life. For example, mobility both in time and place gives the employees opportunities to work late at night at home, when their children are asleep.

However, mobility also creates a risk of extended work hours. When it is possible to work at all times, it is up to the employee to draw the line between work life and private life. For some employees, it might be difficult to make this distinction. The overturning of responsibility from management to employee on organising work makes it more difficult for employees to complain about the workload. Even when management is aware of potential stress and sees symptoms in a particular employee, mobility weakens management's ability to intervene. For example, an employee can be advised not to check emails round the clock but cannot be prevented from doing it.

## Future plans

Grontmij does not have any explicit plan for the further development of mobile work opportunities, although a new trend is the increased use of video or Skype meetings.

## Commentary

As outlined in this case study, ICT-based mobile work is not a new phenomenon among knowledge workers in the construction industry or, in general, among knowledge workers in Denmark.
In Denmark, mobile work does not change the employee's rights or job security. Furthermore, at Grontmij, the possibility of mobile work is not specified in basic employment contracts or in special contracts. Again, it must be stressed that mobile working is common in Denmark and this could, in fact, be a good reason why mobile work should be specifically addressed by legislation and in general agreements between social partners.
However, the Danish labour market has much more informal social dialogue between social partners than is the case in many other European countries. This points to mutual trust between employers and employees, an important and crucial factor for successful application of mobile work in the workplace. The Danish labour market is characterised by a high degree of trust between employers and employees and relatively flat hierarchies. This may play a crucial role in the high flexibility and freedom about how and when to work.

All interviewees point to a general expectation among employees that those to whom the company provides flexible work arrangements will probably have to do mobile work. Mobile work is generally seen as synonymous with flexibility about when and where to work, selforganisation, and a high degree of responsibility on the job. All of these factors are generally accepted as part of the normal working conditions.

## Bibliography

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Helle Ourø Nielsen and Sana Høgenhaven Larsen, Oxford Research, Denmark

