Teleworking Policies of Organisations – The Dutch Experience

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1 INTRODUCTION

Teleworking, as it is called in Europe, or telecommuting, the term more used in the United States, is a rather new form of work. At first sight, it seems to be the perfect fit between the demands of individualised workers and those of a globalised 'new economy'. Many advocates of telework suggest that the association with the 'old' forms of homework, since the early Industrial Revolution aiming at low-cost industrial production by the utmost exploitation of home-workers and still heavily criticised by the ILO and international trade union bodies in the mid-1990s, definitely belongs to the past. Even if this may be true, at least in the economically advanced countries, telework obviously did not develop without a number of social problems. A research program undertaken by the Dublin-based European Foundation between 1985 and 1995 identified three problem areas: the legal and contractual situation of teleworkers; their social security position, and health and safety on telework (Blanpain, 1995; Pennings, 1995; Huuhtanen, 1995). Recent research suggests that these problems are still in existence, although in various shape and intensity for different groups of teleworkers (Jackson and Van der Wielen, 1998; Van Klaveren and Van de Westelaken, 2000).

The first and foremost problem encountered by those studying teleworking is the variation in definitions trying to capture this phenomenon. It is not limited to work at home. International consensus seems to be growing about a definition that describes telework as work performed by a person at a location other than the traditional workplace, for an employer or client, with the help of information and communication technology (ICT), which means using a personal computer and telecommunication connections (phone, fax and/or e-mail). 'Regular' teleworkers do so for at least one full working day per week, at home (home-based teleworkers) or from various sites away from home and the main place of work, using online connections ('multi-site' or mobile teleworkers) (Blanpain, 1995; De Vries and Weijers, 1998).

All available figures point to an impressive growth of teleworking in the European Union during the 1990s. The most elaborate survey on teleworking, ECaTT (Electronic Commerce and Telework Trends), carried out in early 1999 in 10 EU member states, counted 5.5 million regular teleworkers: 4.1% of their labour force. Defined this way, telework penetration is highest in Scandinavian countries (Finland 10.8%, Sweden 8.0%, Denmark 6.6%) and the Netherlands (8.3%), with the UK (4.8%) and Germany (4.4%) to be found in the mid-field. 'Supplementary' or 'occasional' teleworkers, spending less than a full day per week teleworking, add another 2% of the EU-10 labour force, without changing much to the country sequence (ECaTT, 2000). The 3rd European Survey on Working Conditions, carried out in March 2000 by interviews with workers, revealed with 5% a slightly higher percentage of those teleworking for at least one-quarter of their working time in the EU-15 (Paoli and Merllié, 2001). So did a Eurobarometer survey as of November 2000 (5.5%) (European Commission, 2001a). The 3rd European Survey results put the Netherlands (7%) again in the leading telework group. This survey suggested that this group contains the UK, Austria and Belgium too, while confirming that all South European countries have to be found in the rear.

At the turn of the century, the EU obviously is catching up with Japan, that reached a telework level in 2000 of 8.8% among full-time white collar employees or 3.6% of the

total labour force (Hori and Ohashi, 2001). Yet, for the time being teleworking remains a much more widespread practice in the USA. After growth rates of 17-20% in four successive years, in 2001 an estimated 20 to 25% of US workers participated in some form of teleworking (Davis and Polonko, 2001; Cahners, 2002).

In sharp contrast to the widespread notion that telework is a predominantly female domain, the ECaTT survey shows that in 1999 three out of four European teleworkers were men; among the regular teleworkers, the male percentage even was 81. Figures for the Netherlands are somewhat lower, but still indicate a male share of 65 to 70%. A recent indication came from a non-random 2001 Internet wage survey of the FNV trade union confederation, covering nearly 13,000 people, in which 34% of those answering to do paid work at home were women (cf. Van Klaveren, Sprenger and Van de Westelaken, 2002). All available figures concerning the participation of women in telework are much lower than often expected, and contrary to those in 'classical' industrial homework. For example, women made up 90% of the approximately 40,000 workers still involved in the latter type of work in the Netherlands in 2000 (Van Klaveren and Van de Westelaken, 2000). A majority of the European (regular and supplementary) teleworkers (59%) had high level education, against 27% of those in paid work but not teleworking. 78% of all regular teleworkers in the 10 EU countries surveyed had any managerial responsibility in their job, against 45% of those in paid work but not teleworking (ECaTT, 2000). The 2000 Eurobarometer survey confirmed these outcomes for the EU-15, although less outspoken, with 6.1% teleworkers among all male workers, 4.8% among all females, 18.8% among managers, and 9.3% among other white collars (European Commission, 2001b). Analyses on the Dutch data of the 2nd and 3rd European Surveys on Working Conditions (1995/96 and 2000) confirm the EU pattern, showing an over-representation among Dutch teleworkers of managers, qualified professionals as well as qualified technicians (Dhondt and Van den Heuvel, 1998; Kraan and Dhondt, 2001).

This article focuses on teleworking policies of organisations in the Netherlands. In doing so, we hope to contribute to filling a gap in the management literature. Unless the rapidly growing pile of this literature, organisational policies in this field have hardly been studied into some detail. Regardless --or maybe because of-- the fact that the literature is full of lists concerning the benefits or the dangers of teleworking, it has produced remarkably little evidence about employers' policies and their considerations to stimulate, slow down or neglect telework so far. The lack of both academic and organisational interest is especially remarkable projected against the background of the emerging interest in teleworking of many stakeholders.

After reviewing the interests of important categories of stakeholders concerning telework, this article concentrates on one decisive category, the employers. We aim to provide insight in organisational policies on teleworking, trying to answer two major questions: 1. which kind of work organisations tend to develop teleworking policies? 2. why do work organisations (not) develop teleworking policies? As a further introduction, we will deal with main issues regarding the teleworking policies of organisations, concentrating on the 'teleworkability' of functions and on arguments in favour of teleworking, related to the combination of organisational renewal with flexible workplaces, and the offering of teleworking as an 'employee benefit'. Next, we present our empirical part. Here, we will try to answer our two questions for the Netherlands, based on research by ourselves and some colleagues. To explore which organisations have developed teleworking policies, we use data from two surveys

among employers. We will add results of in-depth interviews with personnel officers and worker representatives in order to elaborate on the ‘why’ question. In our final section, we will draw conclusions regarding the diffusion of telework in the Netherlands.

2 STAKEHOLDERS' INTERESTS

In this section, we discuss five major categories of shareholders with regard to teleworking, notably public authorities (at European, national, and local level); suppliers of relevant hardware and software; trade unions; workers, and employers.

2.1 PUBLIC AUTHORITIES

The European Commission has developed into one of the most marked advocates of teleworking. The issue started to climb the agenda of the Commission in the mid-1990s. In 1999-2000, the promotion of teleworking opportunities was a component in the Commission's proposals for a Strategy for Jobs in the Information Society, including a recommendation to "set up framework conditions and practical arrangements to enable telework to take place on a wide scale". An ambitious deadline, the end of 2000, was proposed for the establishment of collective agreements concerning teleworking (European Commission, 2000b). With the Lisbon European Council in March 2000, achieving an 'Information Society for all' became a political priority for the EU. A High Level Group report recently stressed the importance of exploiting 'the digital potential', including teleworking, for disadvantaged people and less-favoured regions (European Commission, 2001b). The Commission (1999, 2000a) was already documenting the development of telework or 'E-work' elaborately, as well as promoting research and awareness-raising about its social and economic potential.

Most administrations of EU member states, rather irrespective of their political orientation, have shown interest in teleworking too. Especially in Sweden, Finland, Ireland and Germany, teleworking is promoted for purposes of employment creation in less-favoured and/or remote regions, whereas in the Netherlands especially the Ministries of Economic Affairs and of Environment consider its expansion a (partial) solution for the country's endemic traffic congestion problems and related air pollution. Relatively high traffic costs may encourage telework, no matter whether these costs are caused by long distances or by home-to-work traffic jams. In all countries mentioned, teleworking is growingly considered an option for workers with disabilities to keep paid work or be re-integrated in it (European Commission, 1999, 2000a, 2001b).

Seen against the background of its problem-solving potential, surprisingly little evidence is available that local communities in the EU are developing policies for teleworking of their citizens. Most local projects relate to easy access to new data communication facilities, like broadband communication, and to housing projects. In Sweden, Finland and the UK, a limited number of local authorities have sponsored centres with telework facilities, known as 'telecottages' (European Commission, 2000b). Recently, housing corporations in some Dutch towns are building houses with (possibilities for) teleworking facilities. The Dutch Department of Transport is supporting the Knowledge District project in the Eindhoven region, making the latest data communication technology available to 38,000 households. In this region, the spread of teleworking nearly doubled in one years' time (Vermeulen, 2001).

2.2 SUPPLIERS OF HARDWARE AND SOFTWARE

Large telecom companies like Siemens, Toshiba, Deutsche Telekom, France Telecom and (Dutch) KPN are greeting a promising new selling area, and promote teleworking fiercely. Recently, ICT suppliers have started to offer complete hardware and software packages for teleworkers (Klomp and Van Oosterhout, 2001). ICT companies claim substantial productivity increases derived from teleworking, in the 10 to 30% range. Other companies playing a vanguard role in this field, like German car producer BMW, report outcomes of the same magnitude. While stating that white-collar productivity gains are difficult to measure, European Commission reports confirm increases attributed to teleworking more generally of 0 to 30% (European Commission 1999, 2000a; ECaTT, 2000).

Computer and telecom companies are also reshaping the industrial relations landscape in the EU. They were the first to sign teleworking collective agreements, like IBM Germany (works agreement, 1991), British Telecom (agreement concerning Inverness teleworking experiment, 1992), and Deutsche Telekom (agreement with postal workers' trade union, 1995, broadened in 1998) (European Foundation, 1998; www.euro-telework.org). In the Netherlands too, ICT companies have entered agreements on teleworking relatively early, like KPN, Origin, Digital and Compaq – although the latter two limited themselves to agreements with individual workers. In February 2001, the EU Social Dialogue Committee in the telecommunications sector, made up of 13 major companies, and the European trade union secretariat UNI Telecom adopted guidelines for the organisation of telework, "organised and introduced as a human and socially meaningful working method" ('Commission welcomes', 2001). Some ICT suppliers have established further co-operation with trade unions, like Deutsche Telekom, supporting a German union initiative for employee-oriented telework consultation (www.onforte.de, 1997), followed by the creation of a platform for telework users jointly with DGB, the German trade union confederation (www.anwenderplattform-telearbeit.de, 2000).

2.3 TRADE UNIONS

Trade union bodies all over the EU have recently shown increasing interest in teleworking, at the same time evolving their policies from mainly defensive attitudes towards more balanced approaches. Trade union goals formulated in the 1980s stressed the need to prevent a return to characteristics of 19th century homework, whereas in the 1990s the European trade union movement started to emphasize the opportunities telework can offer for workers. A European website exposing best practices and (model) collective agreements has been set up as a challenge for union negotiators to bring about these opportunities, offering at the same time instruments to mitigate the social risks of teleworking (www.euro-telework.org).

In a number of EU member states collective bargaining on telework is developing. These are not only countries where telework is reaching solid ground (Denmark, the Netherlands, UK), but notably also Germany, Austria and Italy. The main issues at stake are: contractual status; working time (number of hours/days at home, attainability/availability, and workload); infrastructure, equipment at home and expenses (to be paid by the employer); teleworkers' involvement in information, (work) consultation, participation and negotiation, avoidance of social isolation; teleworkers' training and careering rights; data security; (limitations to) control and checking; pay systems, and social security issues. One might have expected that, in

line with the Dutch ‘polder model’ tradition, trade unions and employers’ federations especially in the Netherlands should jointly have recommended to stimulate teleworking. This is not yet the case, although this might change under the influence of the European framework agreement on telework, agreed upon on July 16, 2002, by the European social partners ETUC, UNICE/UEAPME and CEEP. This agreement is rather unique as it has to be implemented in the EU member states by the national social partners instead of by legislation (Van Klaveren, Sprenger and Van de Westelaken, 2002).

2.4 WORKERS’ INTEREST

For several reasons, individual workers show great (latent) interest in teleworking. Concerning the Netherlands, four surveys confirm this interest: besides the ECaTT survey, a representative survey among residents of Amsterdam (Van Vuuren et al, 1998); a survey conducted in 1999 among 1,689 Dutch ICT workers (Tijdens, Van Klaveren and Wetzels, 2000); and a Telepanel survey as of March 2001 among 918 men (four-fifth having paid work) and 814 women (two-thirds with paid work) concerning their ICT use (Wetzels and Tijdens, 2001). All four indicate a strong wish to telework. ECaTT showed that 39% of the Dutch respondents with paid work had considered teleworking for themselves (EU-10: 22%). Half of all respondents in the 1998 Amsterdam survey said to have jobs that were suited to teleworking; of this group, 60% wanted to but were hindered at work from doing so. Of all ICT workers in the 1999 survey, 40% had possibilities for teleworking, but 77% wanted to. Finally, in the 2001 Telepanel survey 22% of the respondents with paid work answered that they were able to telework. However, 49% was willing to.

According to the Dutch surveys mentioned above, three motives dominate among workers for wanting to telework. In the Netherlands, reduction of commuting time is most mentioned: it is the no. 1 motive in the 1999 ICT survey and in the 2001 Telepanel survey, and no. 2 in the 1998 Amsterdam survey. All survey results show that workers with long commuting times prefer teleworking stronger than those spending shorter time in commuting. Over-all, more freedom and flexibility to schedule the day ranked second in motives: no. 1 in the 1998 Amsterdam survey, no. 2 in both other surveys. Teleworking obviously facilitates flexible daily schedules. However, it is neither broadly regarded a viable option to ease the responsibility of women to care for children, nor an alternative to childcare. According to the 2001 Telepanel survey, the home situation did not influence the wish to telework. The 1999 ICT survey showed that the need to telework was greater the longer the commuting time, the more household tasks had to be done, and the stronger the feeling that too little time remained for family, relatives or friends, indicating that ICT workers consider teleworking a vehicle for reaching a better balance between ‘work’ and ‘private life’, whether the care for young children is at stake or not. Finally, the third important motive is to find a quiet workplace. In the Amsterdam survey, this was the no. 3 motive, in the 1999 ICT survey no. 4, while in the 2001 survey it ranked no. 3 among the male respondents and no. 4 among the females. Apparently, many common office workplaces offer insufficient opportunities to perform necessary tasks in a concentrated way.

3 POLICIES OF WORK ORGANISATIONS REGARDING TELEWORKING

Seen against the background of this rising wave of interest in teleworking, work organisations in the European Union generally are still rather reticent about teleworking. They certainly do not promote this new form of work on a wide scale. According to the ECaTT survey, only 18% of the establishments in the EU-10 without telework was interested in introducing it, which meant that in 1999 over 48% of all establishments had no interest in introducing telework at all (ECaTT, 2000). The discrepancy between the wave of interest described above and this attitude looks stunning. We will see whether it is still astonishing after we have presented empirical evidence about the policies of organisations regarding teleworking, including evidence about the 'teleworkability' of functions, a discussion of the link between organisational renewal and teleworking, and a discussion of the use of teleworking as an employees' benefit.

3.1 WHICH FUNCTIONS ARE 'TELEWORKABLE'?

The concept of 'teleworkability' is often used in forecasting the diffusion of teleworking. In simple models, the technical feasibility of telework is linked up with the actual and extrapolated spread of work performed with the help of ICT. ECaTT provides data to forecast the spread of such 'information work', as in its survey respondents were asked if they spent more than 6 hours per week on (a) office work, (b) work which could be done at a desk, and (c) work on a computer or using a computer-controlled machine. If such tasks can be condensed in (at least) one working day, they may lend themselves to 'regular' teleworking. Counted this way, 'technical' teleworkability may extend to 65% of all persons with paid work in the EU-10, yet without a positive correlation with actual national levels of telework (ECaTT, 2000). Moreover, these are upper limits, and one might wonder if these figures will ever turn into reality. A recent Dutch study, for example, predicts the 'teleworkability' of about 60% of all jobs in the Netherlands not before 2020 (Klomp and Van Oosterhout, 2001).

Gareis and Kordey point out that forecasts should also reflect worker attitudes. Based on ECaTT, they calculate national saturation levels as the products of technical teleworkability and worker interest figures, stating that "it is not at all clear that every potential teleworker will be offered a telework place even in the distant future" (Gareis and Kordey, 2000, 4). These authors rightly interpret the diffusion of telework as a techno-social innovation, influenced by the behaviour of many stakeholders. They identify as the most important barriers to diffusion those affecting the willingness of employers to offer telework to their workers. In a second model, somewhat more complex because it takes into account this willingness by using ECaTT data on teleworking practices and plans of establishments, Gareis and Kordey estimate 2005 diffusion rates for the 10 EU countries surveyed. In their outcomes concerning all kind of teleworkers, the Netherlands ranked second with 25% of its total labor force, after Finland (29%), with a EU-10 average of 10.8%. For home-based teleworkers, the Netherlands ranked with 10% in 4th place, after Finland (17%), Sweden and Denmark (EU-10 average: 4.2%).

In the Netherlands, the technical infrastructure relevant for teleworking, including cable, ISDN and Internet facilities, is comparatively well developed. Computer literacy is high as well. In June 2001, Dutch Internet use was the second highest amongst the EU countries, reaching two thirds of the population (EU-15: 34%) (European Commission, 2001b). According to the European surveys on working conditions, the countries' workplace computer use ranked first in the EU both in 1995/'96 and 2000 (Smulders, 2000; Paoli and Merllié, 2001). Comparable figures derived from the Telepanel 2001 survey show that the part of Dutch workers never using computers halved from 35% in January 1996 to 18% in March 2001. Since 1998, Dutch tax regulation allows employers to pay tax-free sums to teleworkers for covering costs of a home work space (tables, chairs, lightning, et cetera: maximum € 1,815 over 5 years) and of computer equipment (maximum € 2,268 over 3 years), thus (partly) compensating the tax deduction possibilities for commuting expenses. Taking into account these external conditions, the expectation is justified that the employers and the self-employed will be the dominant actors in the diffusion of telework in the Netherlands till 2005. The willingness of the employers to give in to the pressure of workers to telework and the ability of the self-employed to work on distance, neutralizing resistance of their clients, will be decisive factors in this field.

Building on forecasting models that use hypotheses based on expectations like these and on more specific diffusion patterns, one of the authors has predicted a level of (regular) telework in the Netherlands in 2005 between 12.1% and 13.2% of the labour force. Using a model based on variations between branches, the growth of the percentage of female teleworkers is somewhat lower than that of males, while a model based on variations between occupational groups shows a slightly higher growth rate for women. Yet, in both models the gap between the numbers of male and female teleworkers is still growing, the main explanation being the overrepresentation of women in branches and occupations with low 'teleworkability', like health care and education. In 1999, about six of ten Dutch women were employed in those branches jointly making up the category with the lowest telework potential, against three out of ten men (Van Klaveren and Van de Westelaken, 2001).

In the Netherlands teleworking seems to be an accepted form of work for a rather limited number of tasks and activities. Examination of the literature and a telephone enquiry amongst Dutch companies provided us with an overview of sectors and activities in which home-based teleworking and/or multi-site teleworking are accepted practices. These activities are on the one hand routinised, repetitive administrative and sales tasks (data entry, other administrative processing, telemarketing), to be carried out without direct supervision and without intensive 'face-to-face' communication, and on the other hand specialised, complex managerial, technical and other professional tasks (research, development, programming, consultancy, policy preparation), with comparatively high levels of work autonomy and carried out without direct supervision too.

Table 1 Sectors, activities and type of telework; the Netherlands, 2000

Sector	activities	Home-based tele-working	Multi-site teleworking
insurance companies, incl. health insurance	data entry, policy and complaints processing	X	
	telemarketing, commercial activities	X	X
printing and publishing	lay-outing, designing, word processing	X	
	translation, telemarketing, commercial activities	X	X
mail order companies	telephone service, telemarketing	X	
ICT companies	software development	X	
	programming, consultancy, on-line support/maintenance, sales	X	X
market research bureaus	telemarketing, data entry, coding, word processing	X	
	translation, research	X	X
organisational consultancy and engineering bureaus	translation, consultancy, research	X	X
	policy preparation, inspection		X
public administration	word processing	X	
	translation, policy preparation, research, inspection	X	X
pharmaceutical industry	translation, telemarketing, commercial activities	X	X
	on-line support		X

Sources: Van Klaveren and Van de Westelaken, 2000; Van Klaveren, Tijdens and Wetzels, 2000.

Which limits do employers pose on teleworking? In the Netherlands, the formal possibilities they offer prove to be mainly affected by attachment to the workplace, presence and scheduling at work as well as, to a lesser extent, job and sector. In the 1999 ICT survey, the hypothesis was tested that the possibility to telework diminishes the more the job is attached to the workplace, the more presence is required and the greater the scheduling imposed. This hypothesis was largely supported. Such results suggest that (Dutch) employers define teleworkability rather narrowly, namely if job or activities allow for it. A number of Dutch collective agreements seem to support this practice because their clauses on teleworking make a distinction between 'teleworkable' and 'non-teleworkable' jobs, related to jobs and activities as well as to the structure and working methods of the departments in question. This is truly so if such clauses leave the definition of teleworkability unilaterally to the employer, as is the case in the KPN agreement and in the general arrangement for government workers, enacted by the Dutch Minister of the Interior in 2001.

On the other hand, the 1999 ICT survey proved that attachment to the workplace, presence and scheduling did not play a role in the considerations of the workers. Their preferences for teleworking are primarily influenced by their domestic situation and their commuting times, rather than by the teleworkability of the job. The survey results revealed that the policy of employers to indicate 'teleworkable' jobs did not match in any way with the preferences of ICT workers for teleworking. We did not even find any point of agreement on this. The 1998 Amsterdam research mainly confirmed these results, but added a surprising and highly interesting feature. More than half of the Amsterdam citizens interviewed defined their work as teleworkable, a substantially higher percentage than might be expected from the stated task or job lists. Much to the surprise of many employers, quite a number of their workers did telework although the employers were not aware of that fact before being confronted with the research results.

3.2 ORGANISATIONAL RENEWAL

As we stated, organisational policies with regard to teleworking have hardly been studied into some detail. West-European experiences indicate that the wider diffusion of telework is positively related to organisational renewal, especially to the development of coordination and control mechanisms at company level that give ample room for organisational flexibility. New forms of coordination and motivation seem to be necessary in order to yield positive outcomes from teleworking of higher qualified workers. The Tayloristic grouping of functions obviously has to be left and redesigned into grouping by markets, in units, in projects, and/or in inter-organisational networks. In these change processes, traditional direct control mechanisms are being replaced by new forms, such as ex ante control, by selection and training, ex post control, using output and outcome management, as well as mechanisms of internal motivation, granting individual teleworkers responsible autonomy (Mintzberg, 1983; Daniels, Lamont and Standen, 2000; ECaTT, 2000).

Examples of the large-scale introduction of teleworking in Dutch organisations give more precise clues as to the related changes. Interpolis, the Tilburg-based insurance company, is maybe the best-known Dutch example. This subsidiary of Rabobank makes extensive use of 'hot-desking', the practice English ICT companies started to apply in the mid-1990s (Stanworth, 1997). Combining desk-sharing with teleworking, its new headquarters enables 1,500 workers to work at 1,015 workplaces (Meijers, 2000). Interpolis has set ambitious goals, aiming at having their whole organisation teleworking in 2003 (although the companies' telework project leader wonders whether this goal can be attained – Van Dijk, 2002). Other Dutch organisations that recently built new premises, like TNO Work and Employment in Hoofddorp, have opted for flexible workplaces in combination with teleworking too. Recently, desk-sharing was reported to be applied in 12% of all offices in the Netherlands (Van Rossum, 2001). Building new offices or relocations can open perspectives for important savings in office costs by applying this combination, as is shown by the case of a large Dutch software house (Frederiks and Limburg, 2001).

Diffusion processes in work organisations often show self-amplifying tendencies. As technological barriers fade away in telework practices, organisational, cultural and psychological constraints come into prominence (Casimir, 2001). On the positive side, like Handy and Mokhtarian (1996) suggest for the US setting, companies that are getting used to a dispersed and relatively autonomous workforce may become more comfortable with 'telecommuting'. Thus, changing and/or multiple locations can well work in favour of developing or enforcing policies for teleworking. On the other hand, bad practices in telework point to lack of organisational integration of this form of work, including insufficient ICT support, no adaptation of work processes and communication patterns, neglect of data security issues, lack of training and of involvement of worker representatives (European Commission, 2000a). We suppose that organisational diffusion processes of telework nearly always have to break through certain ceilings. Organisations need the settling of new structures and policies, before they are ready for a new take-off to a higher level of teleworking. Such alternation of jumps and standstills are logical in view of the complex interplay of organisational design, investments in ICT infrastructure, developments in skill structures, sharing of knowledge and training, as well as the necessity of major changes in shop-floor and company industrial relations (European Foundation, 1998).

First, the step from informal, ad hoc teleworking arrangements, only to be agreed upon by a department supervisor, to its broad, formal realisation in a large organisation universally requires careful planning as well as adjustment in a number of organisational dimensions and policies. As Watad and DiSanzo argue, based on a US case study: “New skills must spread quickly throughout the organisation, and the firm must spend a vast amount of capital to update its information infrastructure and to train employees” (2000, 86). The successful implementation of large-scale teleworking requires combinations of organisational flexibility with good ICT infrastructures and well-developed HRM policies (Limburg, 2002). Second, also organisations that have lived through re-engineering processes and have adopted teamwork, most likely will bounce to ceilings linked up with problems of disseminating and sharing expertise. In a Dutch survey of 50 teleworkers in four companies half of them, mainly qualified professionals, answered to encounter problems of sharing knowledge (Bijsterbosch, 2001). The case study, mentioned earlier, of a major Dutch software house shed light on the complexity of technical and organisational changes that were needed to create adequate telework facilities for workers (in this case software developers) working in teams (Frederiks and Limburg, 2001). Third, as we will argue in our final section, in the North-West European industrial relations context the pressure for agreeing upon collective agreements in the course of teleworking diffusion processes may create both ceilings as well as perspectives for further diffusion.

3.3 EMPLOYEE BENEFITS

Since a few years, a new employers’ motive has come into play: employers use the preferences for workers to telework as an ‘employee benefit’ in a tight labour market. Studies from various countries indicate that offering teleworking can strenghthen and extend the employment relationship. For example, in a study of 300 employees from a number of Canadian companies both managers and employees expected that employees were more likely to stay at the company when they were given opportunities to telework (Khalifa and Etezadi, 1997). As international overviews (for example Jackson and Van der Wielen, 1998) indicate, the experiences of teleworkers in qualified jobs, requiring autonomy and variation, are generally rather positive, and point to stabilisation or even improvement of their well-being at work (and beyond). As Baruch (2000) suggests, telework may cope with the high needs for autonomy many of these workers have developed, and they may appreciate its benefits accordingly.

These positive findings are supported by Dutch evidence, although rather scarce and dispersed. Pilots at the Dutch Ministry of Economic Affairs revealed that after one year of teleworking the workers involved wanted to continue this practice. Evaluations of pilots at Interpolis went in the same direction (Ministerie van Economische Zaken, 1998; Hinrichs, 2000). Recent research only partly confirms the occurrence of disadvantages of teleworking for workers often mentioned in references, like the increase of work-related stress. In the small Dutch survey of 50 workers half of the respondents answered that stress levels remained the same before and after teleworking and one third concluded to less stress (Bijsterbosch, 2001). In the Dutch part of the 2nd European Survey on Working Conditions a majority of teleworkers, while admitting that they had to work at high speed and to contend with tight deadlines, also answered that they had good coping possibilities, including control over task order and work methods (Dhondt and Van den Heuvel, 1998). The

quality of work of the managers, qualified professionals and qualified technicians, jointly making up a majority of the Dutch multi-site teleworkers (totalling 308,000 in 1999, according to ECaTT) and a minor part of the home-based teleworkers in this country (according to ECaTT 285,000), can be assessed as 'reasonably good'. Thus, about two-thirds of Dutch teleworkers can be situated within upper segments of the labour market and within the realm of the 'new economy', at least as long as the period of boom lasted and tight labour market conditions prevailed.

However, in the Netherlands working conditions, wages and labour market perspectives of teleworkers are rather segmented. A majority of home-based teleworkers, performing repetitive administrative and sales tasks, still encounters substantial problems with the quality of work. One may expect many of them to be bound to strict software routines or 'scripts', like in call centres. Based on interviews and additional evidence, Van Klaveren and Van de Westelaken (2000) identified as specific problem areas in this segment of about one-third of all-teleworkers: job content, work autonomy and variation, control over work methods, information on job and organisational change, and careering – very much 'old economy' problems indeed.

Looking at the preferences amongst workers in favour of teleworking and at the over-all positive evaluations of teleworking experience, offering the opportunity to telework not only seems a potentially successful employer strategy to keep staff with the organisation, but also for recruiting qualified workers. As the CEO of Interpolis stated, "teleworking gives us a competitive advantage in the field of staffing. In practice, it is enlarging the possibilities to attract the right people" (Hinrichs, 2000). Nevertheless, in the Netherlands employers obviously regard the opportunity to telework largely as a 'benefit' for incumbent personnel and hardly or not as part of a recruiting strategy. Only three out of 1,203 personnel advertisements (0.25%) in five Dutch newspapers, four national ones and one regional, of Saturday, August 19, 2000 explicitly offered *bona fide* possibilities for teleworking (Tijdens, Van Klaveren and Wetzels, 2001). On behalf of this article, we repeated this counting of personnel ads 17 months later, on Saturday, January 19, 2002. We found that only two out of 1,304 ads (0.15%) referred to possibilities for teleworking. Although the number of ads indicates that the Dutch labour market still was quite tight at the last moment of counting, employers still did not use offering telework opportunities as a recruiting strategy.

4 THE EMPIRICAL PART

4.1 HYPOTHESES

This article aims to provide answers to two questions: 1. which kind of work organisations tend to develop teleworking policies? 2. why do (don't) work organisations develop teleworking policies? First we have to state that we operationalise 'teleworking policies' in this empirical part by using a rather minimal definition: if work organisations offered the opportunity for teleworking and, if they were asked for, paid for the necessary telework facilities. We developed two sets of hypotheses in order to answer the two questions.

Set 1: regarding the kind of organisations, we assume, grounded on the literature review in the previous sections, that a. organisations with changing and/or multiple locations, b. organisations experiencing labour shortages, c. large organisations, d. organisations where jobs are not necessarily attached to the workplace, e. organisations with higher skill level of staff, and f. organisations with a higher proportion of women ('female-dominated') will be more likely to develop teleworking policies.

Set 2: regarding the question why organisations (do not) develop teleworking policies, we assume that those with telework policies have a clear view on a. the numbers and the categories of workers that prefer teleworking, b. the numbers and the categories of workers already teleworking (also informally), c. the difficulties that might be expected in the implementation (diffusion) process, taking into account organisational disadvantages and extra costs, and d. the difficulties that might be expected in the implementation process, taking into account problems if the benefits workers are expecting from teleworking are counterbalanced by expected losses.

4.2 DATA AND RESEARCH METHODOLOGY

We used various methods to test our hypotheses. The first set was tested in an AIAS survey, based on random sample of 314 firms in five industries as well as by a smaller 'best-employer' survey. The AIAS survey was undertaken with a broader goal: to analyse the effects of collective agreements on the policy of companies. It was part of a study to measure the presence in the Netherlands of various forms of flexible working and to record the reasons for this flexibility. Furthermore, we used the results of a survey in which payment, employee benefits and labour conditions in 120 large organisations were compared and classified in a '50 best Dutch employers' ranking. This non-random survey was carried out in January/March/September 2001 by 'Intermediair', the Dutch weekly for academics, advised by one of the authors (Sengers and De Vos, 2001). In order to test set 2, we added results of in-depth interviews with personnel officers and worker representatives that one of us together with another colleague carried out in eight organisations (three ICT companies, three (health) insurance companies, one trade company, one administrative office) in March 2000 and in March/April 2001 (Van Klaveren and Van de Westelaken, 2000, 2001). Four of these organisations had teleworking policies, that means facilitated teleworking and paid for the necessary telework facilities, the four others did not

allow teleworking (two) or at least did not facilitate it in any way (two). On behalf of this article, we have regarded this last four as not having telework policies.

The AIAS survey took a random selection of 882 establishments of companies and institutions from the Chambers of Commerce database, selected according to branches (NACE code) and minimal numbers of staff. Organisations were selected from five industries with industry-wide collective agreements: construction industry, metal and electronics industry, the banking sector, hospitals, and local authorities. Moreover, an additional 75 organisations from other industries were selected. The response was 39%. In May 2000, telephone interviews were conducted with the directors or personnel officers of 340 establishments. Relevant questions asked were those concerning work locations, possibilities for the personnel to work or telework at home, and reasons why workers were not allowed to telework. Almost half of the establishments that refused to be interviewed referred to lack of time, pressure of work, or holidays of responsible officers. Just over 10% objected to take part in interviews anyhow, and a somewhat smaller group simply did not want to take part. A dataset with 314 business establishments remained after cleaning up for questionnaires incompletely completed, missing values for the central variables, and establishments with fewer than 20 workers (Tijdens and Van der Meer, 2000; Wetzels and Tijdens, 2001).

In the rest of this article, these 314 establishments are referred to as 'organisations'. The sample distribution over industry and firm size is presented in table 2.

Table 2 Numbers of companies by sector and size (N=314)[1]

collective agreement (CAO)	< 100 workers	100-500 workers	> 500 workers	total	%
Construction	28	20	2	50	16%
Metal	35	26	4	65	21%
Local authority	26	25	9	60	19%
Hospital	2	0	18	20	6%
Banks	17	29	4	50	16%
Other	23	28	9	60	19%
No CAO but company scheme	3	4	1	8	3%
No CAO and no company scheme	0	0	1	1	0%
total	134	132	48	314	100%
%	43%	42%	15%	100%	

Source: AIAS survey of company policy and collective agreements

4.3 WHICH KIND OF ORGANISATIONS TEND TO DEVELOP TELEWORKING POLICIES?

In the survey of 314 organisations, the first relevant question concerned the work location of the workforce. Table 3 shows that for hospitals and banks, this location was in all cases at the organisations' premises, whereas in the construction industry the workplace address was largely a changing affair although often with a fixed reporting point. In the metal and electro-technical industry as well as in the group of other sectors, a minority of staff worked at changing workplace addresses with a fixed reporting point. Further analysis of the Telepanel 2001 results reveals that workers in organisations with more than one location are more likely to be given the opportunity to telework. These effects are quite large: compared to their colleagues in

[1] Relationship between sector and size: Chisq=101,23, p=.000, df=43.

organisations with one location, they are 70% more likely to be given this opportunity (Peters, Tijdens and Wetzels, 2002). Thus, our hypothesis (part of 1a) is confirmed as far as it concerns the relation between possibilities for teleworking and multiple locations.

Table 3 Work location by sector and size of organisation (N=314)

Work location	at our organisation	at the customer	home address	changing workplace address with fixed reporting point	changing workplace address with no fixed reporting point	total
By sector	%	%	%	%	%	%
Construction	8	4	0	51	37	100
Metal and electro	83	0	0	14	3	100
Local authorities	97	0	0	3	0	100
Hospitals and public health	100	0	0	0	0	100
Banks	100	0	0	0	0	100
Other sectors	75	3	1	16	5	100
By company size						
< 100 workers	70	2	1	19	8	100
100-500 workers	76	1	0	14	9	100
> 500 workers	92	0	0	6	2	100
Total	76	1	0	15	8	100

Source: AIAS survey of company policy and collective agreements

The survey asked whether workers could work at home, telework, or both. Table 4 shows that in 80% of the organisations surveyed workers did not have the possibility for homeworking and/or teleworking according to the directors or personnel officers involved. Workers were allowed possibilities to continue work at home in 10% of the organisations. Telework as such scored only 2%. The combination of working at home and teleworking was noted somewhat more frequently. Local authorities obviously had the least objections, in 32% of all cases offering workers the possibility to work from home and/or telework, followed by 'other sector' and banks.

Table 4 Possibility to work from home or telework by sector (N=314)

	work from home only	telework only	work from home and telework	No/ do not know	total
by sector	%	%	%	%	%
Construction	4	0	6	90	100
Metal and electro	7	2	5	85	100
Local authorities	20	2	10	68	100
Hospitals and public health	5	0	5	90	100
Banks	12	0	6	82	100
Other sectors	9	4	10	77	100
Total	10	2	8	80	100

Source: AIAS survey of company policy and collective agreements

Conducted only one year later, the 2001 'best employer' survey showed marked differences with the results of the AIAS survey regarding the possibilities to work at home. 87% of the 78 organisations in the 2001 survey responding on the work at home issues answered that their highly qualified (!) workers could work at home. Moreover, more than half of these 'best employer' organisations (52%) also facilitated teleworking and/or paid for the necessary telework facilities, a higher percentage than in a household survey held in December 1999 that indicated that only 39% of the employers of the respondents contributed to the cost of the workplace at home (Heliview, 2000). The differences in the 2001 survey results between sectors

were very small. With 52% as well, the ICT companies did not show a more generous behaviour than the average organisation. This outcome is quite remarkable, because at the time of the survey labour shortages in the Netherlands were by far largest in the ICT sector. Our hypothesis (1b) that organisations experiencing labour shortages will be more likely to develop teleworking policies, is at least partly rejected.

Subsequently, those organisations that did not offer their workers the possibility to work at home or to telework were asked why they did so. Respondents had the option of answering to more than one of the preset reasons or providing, spontaneously, other reasons. By far the most important reason given was that the job did not allow it (49%). This is in line with the research concerning 'teleworkability' referred to in the previous section, suggesting that possibilities to telework are depending mainly on the job at stake. A second interesting result is that many organisations (25%) were not able to give any reason whatsoever. Answers in this category included: "I don't know why", "There is no reason" or, in management newspeak, "We don't have a policy". Only 2% of the responding organisations referred to workers not asking for these possibilities. This, too, is in line with findings from earlier research. Jointly with results of in-depth interviews with personnel officers and of employee surveys like the one of ECaTT, the results of the AIAS survey reinforce the suggestion that workers tend to telework (much) more often informally than formally. We will come back on this at the end of our article.

Some authors claim that employers do not allow teleworking because they do not want to run the risk of losing control over (the activities of) their workers. The Status Report on European Telework 1999, for example, noted for the Netherlands "management resistance and concerns based on old-style 'management by presence'" (European Commission, 1999, 72). If so, managers in the AIAS survey succeeded to hide such concerns: only 3% of the responding organisations referred to this reason. Only 2% of the respondents referred to technical problems, and another 2% to their wish not to isolate workers (2%). Arguments of costing were hardly mentioned: only one organisation stated: "It is too expensive".

Table 5 Why workers have no possibility to work from home or telework, by sector and size of organisation (more than one argument possible)

	job/work does not allow it	no reason/no policy/ don't know	no control
by sector	% cited	% cited	% cited
Construction	67	18	4
Metal and electro	61	19	2
Local authorities	24	34	2
Hospitals and public health	75	10	0
Banks	32	46	2
Other sectors	52	19	5
By size of organisation			
< 100 workers	56	25	5
100-500 workers	42	29	2
> 500 workers	48	15	0
Total	49	25	3

Source: AIAS survey of company policy and collective agreements (N=252, only companies where workers are unable to telework)

Next, table 6 shows that if organisations allowed for teleworking, this was the case for a small proportion of staff. In more than half of the organisations surveyed by AIAS, only 3% of their personnel at the most were said to practice telework. In just under a

quarter of the organisations allowing for teleworking this size was 3-10% of the workers, and in just over a quarter the amount of teleworkers was 10% or more. The percentage of teleworkers almost never exceeded 20. The total number of teleworkers can be calculated at 1.1-1.4% of the total workforce of the 314 organisations. This is equivalent to 6% if we count the ECaTT total for the Dutch sectors at stake[2], which means that the comparable AIAS results come only to 18 to 23% of the ECaTT outcomes. Looking at the size of the organisation, smaller companies offered less opportunities to telework, a result that is in conformity with our hypothesis (1c). Yet, remarkably enough, if such possibilities did exist in this size category, often more than 10% of staff used them. In contrast, more teleworking opportunities existed in large organisations, but for a comparatively smaller percentage of staff[3].

Finally, the percentage of females working from home or teleworking was examined as far as possible: data from 52 companies were available at this point. The results revealed that women worked somewhat less at home or practised teleworking than male workers. In 30 of the 52 companies, both percentages were equal, in 8 companies the percentage of women working from home or teleworking was higher than that for men, and in 14 companies it was lower[4]. This finding is in conformity with other Dutch evidence.

Table 6 Percentage of teleworkers or home workers, total , by size of organisation and by percentage of female teleworkers or homeworkers (N=314)

% of personnel working from home or teleworking	none/ unknown	< 3%	3-10%	> 10%	total
By size of organisation					
< 100 workers	70	2	1	19	100
100-500 workers	76	1	0	14	100
> 500 workers	92	0	0	6	100
By % of women teleworking/ working from home					
unknown	98	2	1	0	100
< 3% women	0	67	17	17	100
3-10% women	0	29	43	29	100
> 10% women	0	25	25	50	100
Total	82	10	4	5	100

Source: AIAS survey of company policy and collective agreements

Which organisations already offered workers possibilities to telework and which stated that the work (job) does not allow teleworking? Table 7 shows the results of our logit analyses on the AIAS survey outcomes.

First, we expected to find significant differences between sectors, because earlier research proved that 'teleworkability' was rather strongly related to sector. Indeed, significant differences between sectors emerged, obviously related to differences in judgements that jobs are attached to the workplace. While local authorities suggested that jobs within their jurisdiction allowed teleworking, hospital employers answered the contrary. Evidently, our hypothesis (1d) is by and large confirmed.

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2 including correction for company size.

3 Chisq=22.31, df=6, sign.=0.001.

4 Chisq=9.48, df=4, sign.=0.050.

Second, we expected that larger organisations would be more likely to develop telework policies than their smaller counterparts. In line with our expectations, workers in organisations of less than 100 workers tended to have far less possibilities to telework compared to their colleagues in medium-sized and large organisations. Like results cited earlier, this result is in conformity with our hypothesis (1c).

Third, we expected that organisations with a higher skill level of staff would be more likely to develop telework policies. Yet, skill level, measured as years of schooling for internal vacancies, prove to have no influence on possibilities to telework. Therefore, our hypothesis (1e) is rejected. As expected, companies with low-skilled staff tended to use the argument that the job does not allow teleworking. Those with skilled staff tended to use the argument that they did not have teleworking policies.

Fourth, we tested our hypothesis (1f), stating that organisations with a higher proportion of women ('female-dominated') would be more likely to develop teleworking policies. This hypothesis is rejected. On the contrary, workers were offered less possibilities to telework in male-dominated companies than in 'integrated' or female-dominated companies.

Table 7 Which companies offer teleworking as a possibility and which companies say that the work does not allow it? (logit analyses)

	possibility to work at home/telework			job does not allow it		
	B	t-value	sign	B	t-value	sign
Sector (other sectors is ref.)						
Construction	0.23	0.32		-0.04	-0.08	
Metal and electro	0.37	0.64		-0.08	-0.19	
Local authorities	0.16	0.38		-1.08	-2.67	**
Hospitals and public health	-2.39	-2.58	**	1.77	2.42	*
Banks	-0.89	-1.54		-0.46	-0.94	
Number of workers (100-500 is ref.)						
< 100 emp	-0.86	-2.40	**	0.52	1.91	
>500 emp	0.74	1.67		-0.25	-0.56	
Percent female emp (11-40% is ref.)						
<=10%	-1.14	-2.01	*	0.59	1.36	
>40%	0.28	0.62		-0.17	-0.43	
Schooling of personnel for internal vacs	1.69	1.60		-1.03	-1.97	*
Constant	-2.41	-2.24	**	0.71	1.26	

Source: AIAS survey of company policy and collective agreements (N=314)[5]

4.4 WHY DO/DON'T ORGANISATIONS DEVELOP TELEWORKING POLICIES?

Individual workers show a growing interest in teleworking, inspired by various motives: reducing commuting time, enabling a flexible day schedule, and a quiet workplace. In the Netherlands, workers' interest in telework was in 1999/2000 with 39-49% four to seven times as high as the actual level of teleworking indicated by ECaTT and other surveys based on interviews with workers (7-10% of the Dutch labour force). Yet, in the 2000 AIAS survey of 314 Dutch organisations in five sectors, only 20% of their directors and personnel officers offered possibilities for work from home and/or telework. According to them, less than 1.5% of 'their' workers actually did so: 18 to 23% of the ECaTT outcomes. 80% of the managers interviewed answered that homeworking and/or teleworking did not take place in

[5] *** p<.001, ** p<.01, * p<.05

'their' organisations at all. The main reason, mentioned by nearly half of them, was that the jobs did not allow it. Moreover, many managers (25%) could give no reason whatsoever why they did not offer possibilities for teleworking. Employers' objections prove to be rather unspecified. The prevailing notion is that for a large majority of jobs attachment to the workplace, presence and scheduling should be necessary, while many of these jobs according to the workers offer good opportunities for teleworking. Combined with the Dutch research outcomes discussed in the first part of this article, these results point to a. a wide gap between employers' and workers' definitions of 'teleworkability', b. gaps between workers' wishes, the occurrence of telework according to workers, and the perception of this occurrence by employers (most notably personnel officers), c. the absence of teleworking policies in a majority of Dutch work organisations. These gaps remain remarkable, seen against the background of the interests of many stakeholders in teleworking.

The 'best-employer' survey revealed that 52% of these (mainly large) 'best' organisations responding on the work at home issues had teleworking policies developed, if we include paying for the necessary facilities into our definition. As could be expected, payment arrangements give reason for some formalisation. Our findings show that, if such arrangements weren't laid down in collective agreements with trade unions and/or Works Councils, they could at least be found in telework agreements between the organization and individual workers. For example, the four work organisations out of the eight that we covered by our in-depth interviews which had any kind of teleworking policies, all had their payment arrangements laid down in agreements: two with both trade unions and individual workers, two with individual workers only. We will now confront our hypotheses of set 2 with results from these interviews. The reader has to keep in mind that the number of interviews is just eight, and that this small number only allows for tentative answers. As we already mentioned, four of these organisations had teleworking policies (facilitated teleworking and paid for the necessary facilities), and four did not (of which did not allow teleworking, two allowed it but did not facilitate it in any way).

First, we expected a serious estimate of workers' preferences for teleworking, expressed by the numbers and the categories of workers that prefer teleworking, to be a prerequisite for the development of teleworking policies. Our hypothesis (2a) is confirmed: personnel officers of three out of the four organisations could deliver serious answers at our related questions, while none of those from organisations without teleworking policies could.

Second, we expected the organisations with teleworking policies to have a clear view of the numbers and the categories of workers that were already teleworking (be it informally). Yet, personnel officers of only two out of the four organisations with teleworking policies could give reasonable answers (that means: with margins of 10% of the actual size of teleworking). The same result gave the organisations without teleworking policies: one of the two that allowed teleworking but did not facilitate it, was able to give reasonable estimates; of course, the other two, not allowing teleworking, both denied that they employed teleworkers. Yet, we had contact with one teleworker in one of the latter organisations. Our hypothesis (2b) is more or less rejected. In four of the organisations (two with teleworking policies, one without but allowing teleworking, one not allowing teleworking) we suspect outcomes going in the direction of the results of the 1998 Amsterdam survey: quite a number of their workers did telework informally but the employers were not aware of that fact.

Third, we hypothesized the organisations with telework policies to have a clear view on the difficulties that might be expected in the implementation process, especially taking into account organisational disadvantages and extra costs. Our interview results were surprising, at least at first sight. Two out of the four organisations with teleworking policies were able to mention disadvantages and costs; the two others did not convincingly spelled them out. Yet, three of the four organisations without teleworking policies mentioned a number of (hypothetical) disadvantages and costs. Therefore, hypothesis (2c) is rejected. On further consideration, this outcome may be explained by the fact that personnel officers refusing to develop teleworking policies may have been looking for counterarguments and found them in (hypothetical) disadvantages and extra costing. We can add that none of the eight organisations had made a thorough cost-benefit analysis concerning the (further) implementation of telework, an additional result that makes the rejection of (2c) even stronger.

Fourth, we expected the organisations with telework policies to have a clear view on the difficulties that could be expected in the implementation process, taking into account problems if the benefits workers are expecting from teleworking are counterbalanced by expected losses. Hypothesis (2d) is confirmed. Three out of the four organisations interviewed with teleworking policies took account of such problems, and two of them clearly tried to solve them. None of the four organisations without teleworking policies could mention such difficulties. All three personnel officers mentioning problems explained that they, as employers, had been willing to pay for home workplace facilities in exchange for reduction of travel cost and/or lease-car compensations, but that this exchange had encountered quite some resistance from the workers' side. All three admitted that they did not expect such problems (and least not of this magnitude) beforehand, two adding that these problems were no arguments to stop teleworking or to change a generally positive attitude towards it. One organisation obviously was more hesitating as to this attitude and to future steps.

Summarizing, the four organisations with teleworking policies in total gave 10 positive answers on the four 'clear view' issues: one scored positively on all four, the other three on only two issues. The four organisations without teleworking policies jointly gave four positive answers: all four just one. Two of our hypotheses are confirmed. The hypothesis that is straightforwardly rejected suggests an inverse relation: most arguments contra teleworking were mentioned by organisations without teleworking policies, of which some did not even allow telework. On the other hand, the view of organisations on the actual numbers of teleworkers turns out to be rather weak, suggesting that maybe in all eight organisations surveyed here again quite some informal teleworking was going on, partly not covered by any agreement. The case of one of the largest software houses of the Netherlands illustrates the discrepancy between formal arrangements and informal practice. Detailed research learned that about 600 out of 6,000 workers of this organisation teleworked in Spring 2001. At the same time, the responsible HRM officer stated that "a few hundreds" of workers did so. Only about 10 workers made formal use of the teleworking agreement agreed upon with the Works Council. The HRM officer mentioned as major obstacles for bridging the gaps firstly the fear of many workers of loosing their lease-car or travel compensations, and secondly the danger of work stress for individuals (Frederiks and Limburg, 2001; Van Klaveren and Van de Westelaken, 2001).

5 CONCLUSION AND DISCUSSION

The over-all picture concerning the diffusion of telework stemming from research undertaken in 2000 and 2001 is rather negative. Teleworking policies of organisations hardly go beyond the minimal definition that we used in analyzing Dutch surveys from these years (organisations offering the opportunity for teleworking and, if they were asked for, paid for the necessary facilities). Generally, such policies are missing a solid basis of knowledge of what is going on in the organisation. The conclusion is not exaggerated that a large majority of Dutch organisations are playing a waiting game on teleworking, even in sectors where jobs show a rather high 'teleworkability'. The few exceptions (Interpolis, TNO Arbeid), mainly seizing the opportunities of building new offices or relocations, to combine flexible office with teleworking policies, soon get nation-wide attention. Meanwhile, various surveys indicate a further growth of telework in the Netherlands in the 1999-2001 period, although it might be a clue that this recent expansion seems to concentrate on multi-site telework by mainly self-employed – largely a 'new economy' phenomenon (Van Klaveren and Van de Westelaken, 2001). In this country, teleworking is apparently spreading rather informally and implicitly, leaving a wide gap between the policies of organisations and the preferences of many workers.

Looking after explanations for this conclusion, it cannot be denied that, unless the societal benefits of telework are broadly acknowledged in the Netherlands, the 'translation' of these benefits into organisational policies is still in its infancy stage. A striking example is offered by how the countries' traffic congestion problem is treated. Although the widespread daily traffic jams are subject of general complaints, they are hardly or not discounted into organisational (teleworking) policies. As our interviews in eight organisations confirmed, employers are not particularly concerned about the reduction of home-to-work traffic. A possible explanation for this reluctance may be that they do not feel to be concerned as long as the time spent is mainly that of (and paid by) their workers; the situation might be different if the physical distribution of products is hindered by traffic congestion, with adverse productivity effects. However, teleworking here is not considered to be a solution.

The societal pressure to develop well-founded and formal teleworking policies is rather weak in the Netherlands. Dutch trade unions and Works Councils do not exert much pressure as to conclude telework agreements, although recently some notable exceptions show up, especially the activities of the FNV Bondgenoten union in the ICT sector. Our in-depth interviews in the eight organisations included the activities of Works Councils. Quite interesting was the observation of two councils that they were at the limits of their involvement, since the employer at stake kept on refusing to agree upon telework agreements, even for individual workers. These councils stood under pressure of teleworkers to formalise existing telework practices. Such pressure was mainly related to the insurance problems the workers met or envisaged (problems with social insurance status, liability and danger insurances), and to the problems with (prolonged) working hours, and the related work stress and family tensions. These problems, works councillors of these two companies indicated, were piling up after three to five years of teleworking, for qualified workers in high market segments as well as for workers performing repetitive tasks in low segments. The councillors involved noted that under such conditions, qualified workers tended to chose for the

‘exit’ option and to leave the company, to another employer or to become self-employed – individual solutions which were and will be much more difficult to realise for teleworkers in low segments. Moreover, according to these workers representatives such ‘exits’ bear the danger that could exert less pressure on behalf of teleworkers, especially for those groups that need that mostly. These examples may imply warnings of a much wider scope and may be also relevant beyond the Netherlands.

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