Telework v Evropě a v Lotyšsku: moderní přístupy a budoucí perspektivy

Telework in Europe and Latvia: State-of-the-art and Future Prospects

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Abstract:
Purpose of the article: More usually companies are using telework – a wide-spread practice that allows employees and their tasks to be shared across settings away from central place of business or physical organizational location. Flexible work arrangements are increasingly seen as a key in helping women and men strike a better balance between work, private and family life. Moreover, telework may serve as a tool for regional development as it allows reaching the concentration of resources by using information and communication technologies.
Methodology/methods: The article has been prepared based on the analysis of primary and secondary sources, outcome synthesis and the evaluation of results of a survey of public officials of Latvia (n=1244) and semi-structured interviews with five teleworkers.
Scientific aim: The purpose of this research is to assess the demand for telework in Latvia and make suggestions for the facilitation of telework (not only in metropolitan, but also less populated areas) by taking into account the European experience.
Findings: Even if the issue of telework (distant work, smart work) can be found in the European Commission's agenda the level of employees in European Union working as teleworkers is still rather low. The Latvian case study shows that there is a potential to extend the use of telework. Young people who have established their own business are the first in line to become teleworkers. Also public sector officials would like to be involved in teleworking and believe that it would increase their performance. However, most of the employed are sceptical about the use of telework.
Conclusions: Explanatory and encouraging measures could help to foster the use of telework. Establishment of smart work centers could be a promising solution for further spread of telework, including the countryside, thus also facilitating the regional development.

Key words: smart work, telework, labour management, regional development, rural development

JEL Classification: M54, O38

1. Introduction and research objectives

The past six generations have amounted to the most rapid and profound change mankind has experienced in its 5000 years of recorded history (Gratton, 2011). This has led also to the transition in the way of working. Nowadays more usually companies and institutions are using telework (distant work, smart work). New ICT solutions and technology development allow increasing a proportion of employees in telework. Telework, a wide-spread practice that has steadily increased in the United States and abroad, allows employees and their tasks to be shared across settings away from central place of business or physical organizational location (Robertson and Vink, 2012).

There are potential direct and indirect benefits for teleworkers such as reduction of expenditure (fuel, car parking or public transport), reduction of commuting time, growth of productivity, elastic working time, de-reutilization of work, reduction of noise and stress at the office and an increase in mentoring opportunities. Telework also offers more time for family and friends, hobbies, improved work/life balance *etc.* (Bailey and Kurland, 2002; WorldatWork, 2011; Eurofond, 2007).

Flexible work arrangements are increasingly seen as a key in helping women and men strike a better balance between work, private and family life. In a recent Eurobarometer survey, nearly half of the Europeans said that more flexible working hours would be their favourite measure for a better work-life balance. However, only one third of all European companies offer some kind of flexible working options (European Alliance For Families, 2010).

A notable share of global GDP today consists of immaterial (digital) content and services which are insensitive to distance (Brette and Moriset, 2009). The information and communication technologies (hereinafter – ICT) allow reaching the concentration of resources not only physically, but also virtually in the absence of agglomeration economies (Dubois, 2013). Thus telework gives an opportunity to digitally participate from distant locations in the knowledge economy and may serve as a significant tool for regional development. Some of the European Union member states have introduces special policies for the promotion of telework in rural areas, including the establishment of smart work centres – special premises for smart workers considerably near the person's living place (Micropol, 2013).

The purpose of this research is to assess the demand for telework in Latvia and make suggestions for the facilitation of telework (not only in metropolitan, but also less populated areas) by taking into account the experience of other European Union member states. In order to do that, we have given a statistical overview on telework in Europe, analyzed current regulatory framework and policies in European Union level, as well as given an insight into the forms of implementation European Union framework in 10 European Union member states. Quantitative and qualitative analysis on the state-of art and demand for telework in Latvia is provided. Last but not least, we have given suggestions for the facilitation of telework in Latvia and Europe in general.

The paper is organized as follows. The next section presents the methods used in this research. The third section gives statistical data analysis regarding the usage of telework in Europe, discusses the European Union policies and regulatory framework on telework, as well as presents the empirical findings of a case study in Latvia, including the survey and interviews made by the authors. The fourth section discusses the results. The final section provides a perspective for policy-makers.

2. Methods

The overview on telework in Europe, European Union policies and their implementation in European Union member states was made using such qualitative methods as document analysis and such quantitative method as analysis of statistical data. The research covers 10 countries represented in the INTERREG IVC policy development project Micropol – Smart Work Centres in Non-Metropolitan Areas, respectively Denmark, Estonia, France, Hungary, Italy, Latvia, Netherlands, Slovenia, Spain and United Kingdom.

The Latvian case study is performed using such qualitative method as semi-structured interviews and such quantitative method as surveys. For analysis of potential of telework in Latvia a survey of 1,244 public officials was conducted using an internet questionnaire to find out the opinion on the use of telework to perform their professional duties. The questionnaire was distributed by the State Chancellery – public body responsible for the human resource policy in public sector in Latvia – and reached approximately 16,000 respondents, of which about 8% filled in the questionnaire. The semi-structured interviews were conducted with five teleworkers who work as self-employed or have established a company.

3. Research results

3.1 Telework in Europe

Work outside the office has many definitions in different regions. The beginning of such kind of work was in United States and the first name used to describe this work in 19th century was "outwork". But in 1970-ies the term "telecommuting" appears. Terms "telecommuting" and "telework" were introduced by Jack Nilles in 1973 defined as working outside the conventional workplace and communicating with it by way of telecommunications or computer-based technology (Nilles, 1994; Olson and Primps, 1984) telework constitutes an early form of virtual work. Nilles worked with the development of spacecraft and telecommunications for United States air force and National Aeronautic and Space Administration (NASA). He worked in the University of Southern California as a researcher in various projects which main goal was to study possibilities how to decrease traffic jams if telecommunication system would develop and people would work near the home or at home (Mears, 2010).

Definition of telework in the European Framework Agreement is kept deliberately broad. While this allows for wider space to agree on definitions in the Member States, the lack of a clear definition presents a problem for measuring and comparing the incidence of telework across countries. Article 2 of the European Framework Agreement on Telework of 2002 defines that: "Telework is a form of organising and/or performing work, using information technology, in the context of an employment contract/ relationship, where work, which could also be performed at the employer's premises, is carried out away from those premises on a regular basis".

A slight deviation from the definition in the agreement appears: the Fourth European Working Conditions Survey measures only telework "from home", while the European Framework Agreement on Telework covers workplaces away from the employer's premises other than home as well. However, this deviation can be considered negligible since evidence from other national or sectorial statistics shows that home is a workplace for the large majority of teleworkers.

It should be highlighted that as definitions vary throughout Europe no comparable national statistics on telework are yet available. Since telework is relatively new phenomena the majority of countries have just started gathering statistics on telework; therefore national data do not yet have a solid foundation. For the cross-country comparison in this report we use definition provided by the European Foundation for the Improvement of Living and Working Conditions (2010) – in order to qualify as a teleworker, the employee must work "with a personal computer (PC)" away from the employer's premises at least a quarter of the time. This definition fulfils the criteria set out in the European Framework Agreement's definition as it includes telework that is done slightly more than one day a week on average. To complement the overall picture figures are also given for the incidence of telework that is carried out "all or almost all of the time".

In 1999 there were over 9 million Europeans engaged in new working practices directly involving the use of network technologies. In the Telework Status Reports of 1997 and 1998 the level of teleworking across Europe was reported 1.5 to 2 million people in 1997 and about 4.6 million in 1998. In 1999 this level may have doubled (European Commission, 1999). The results of a survey conducted across 10 of the 15 Member States in 1999 k showed that there were 6% workforce teleworking in EU on average.

According to the data provided by the European Foundation for the Improvement of Living and Working Conditions (2010) in year 2000 situation was slightly different. The overall average proportion of employees involved in telework was about 5.3% in the "older" 15 European Union Member States (EU15) and 4.2% in the candidate countries. In 2005 the overall proportion had increased to 7% for the entire European Union (Eurofond, 2010). Figure 1 shows statistics representing development of telework in selected European Union member states in years 1999, 2005 and 2010.

According to the findings of the Fourth European Working Conditions Survey among the countries represented in this report the highest percentage of employees involved in telework was observed in Denmark, where 14.4 % of employees were doing telework for a quarter of the time or more. Italy noted the lowest percentage, with only 2.3% of workers using telework in 2005.The figures for teleworking "at least a quarter of the time" significantly vary between the countries. However, the overall trend indicates that employment relationships involving "part-time" telework are on average about four times more common than "full-time" telework. This confirms other findings that telework is used to make employment relationships more flexible, while at the same time avoiding possible difficulties that arise when employees are constantly separated from the working environment at the employer's premises.

Looking at the countries with a high prevalence of telework – that is, where telework is performed

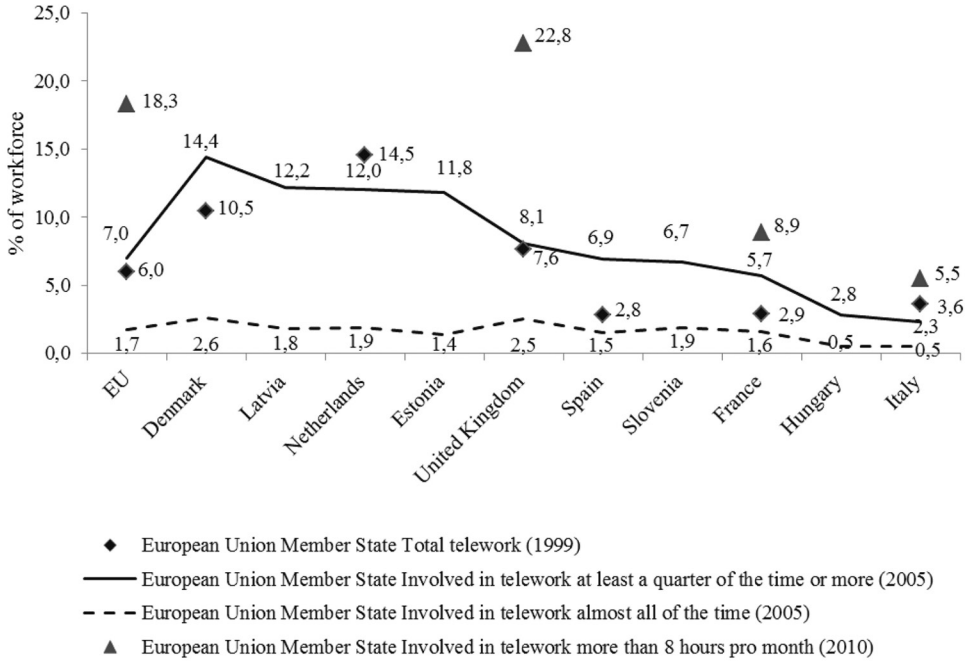

Figure 1. Telework in Europe in 1999 and 2005. Source: European Commission, 1999; Eurofond, 2010 and Rissanen, 2012.

at least a quarter of the time – the following groups emerge: (1) telework is used to a very high extent in Denmark and the Netherlands; (2) telework is also highly prevalent in a group of Member States of the east European countries – Estonia and Latvia. Apart from this, the picture regarding telework is quite mixed, with many countries as diverse as Slovenia, Spain and the UK having close to average figures for telework usage. One group of countries made up of eastern and southern Member States – namely, Hungary and Italy – show very low levels of telework, with a percentage of less than 3%. However Italy, for instance has much higher than average home-based employee telework to total telework. It should be noted that this summary is based on statistics from year 2005 and situation could have been changed since that time.

We can also cluster the incidence of telework in three groups (Figure 2): (1) Member States with a high share of part-time (~12%) and full-time (~1,5–2%) teleworkers – Netherlands, Latvia and Estonia; to some extent also Denmark but with a higher share of part-time (~14%) and full-time (~2,5%) teleworkers; (2) Member States with a high share of full--time teleworkers (~1,5–2%) but a lower share of part-time teleworkers (~5–7%) –Slovenia, France and Spain; to some extent also United Kingdom but with a higher share of part-time (~8%) and full-time (~2,5%) teleworkers; (3) Member States with a rather low share of both part-time (~2–3%) and full--time (~0,5%) teleworkers – Italy and Hungary.

The most recent data (Rissanen, 2012) show that the share of employee teleworking more than 8 hours pro month increases every year (Figure 3). In 2000 only 6,6% of employees did telework in Europe, but in 2010 the share of teleworkers raised to 18,3%. Also in Japan and USA the percentage of teleworkers increased: from 6% to 25,1% in Japan and from 12,4% to 28% in USA. So Japan shows a very rapid increase of teleworkers – percentage share of employee teleworking more than 8 hours increased at 18,5 percentage points in the period 2000–2010.

The largest share of employee teleworking more than 8 hours pro month in 2010 was in Finland – 32,9%. The second place was taken by Belgium with 30,6% employee teleworking, and the third place – by USA with 28%. The lowest share of employee teleworking was found in Italy (5,5%) and France (8,9%).

Despite their potential positive effects on traffic congestion and pollution in cities, the "opportunities of telework are not being fully exploited," according to report by the Organisation for Economic Co--operation and Development (OECD). According to the report, published ahead of an OECD ministerial

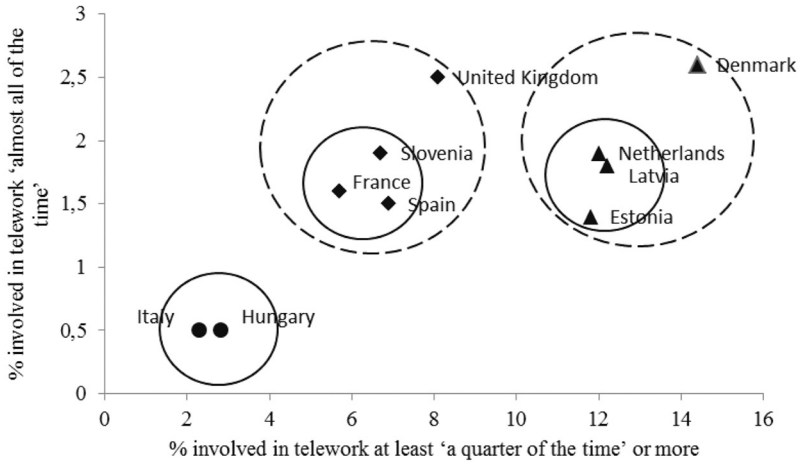

Figure 2. Clusters of Member States regarding the use of telework in 2005. Source: Eurofond, 2010.

meeting on the future of the Internet economy on 17–18 June 2008 in Seoul, almost one in five workers in the world's most advanced economies spent at least one business day per month working from home in 2006. These figures represent an increase of 63% compared with 2004 (OECD, 2008).

In terms of different sectors of the economy a considerably higher use of telework can be found in real estate, financial intermediation and education, where around 15% of the workforce regularly engages in telework at least a quarter of their working time. The figures also show that higher educated workers are more likely to use telework. More than 10% of employees with professional, managerial and technical occupations are involved in telework. The trend that employees with higher qualifications are more likely to use telework is confirmed by the EWCS data on educational levels: a quarter of all teleworkers have an upper secondary education, while more than half have a third-level education. Companies equipped with a high-speed internet connection offer more teleworking opportunities than companies without broadband (OECD, 2008).

Regarding the gender differences male employees are generally more likely to do telework than female workers: on average, about 8.1% of male employees engage in telework, while 5.8% of female employees use this form of work. Such gender differences can be at least partly explained by the distribution of telework among sectors and occupations. Sectors with a higher incidence of telework – such as real estate and financial intermediation – also tend to have a male-dominated workforce. The same tendency is true for workers in higher skilled occupations as well as technical occupations, where there are less female employees. Gender-segregated labour markets therefore seem to be one of the possible factors explaining the gender differences regarding telework (Eurofond, 2010).

Characteristics of teleworkers in Belgium confirm overall results of the distribution of telework for the EU27. In the case of Belgium, for instance, the majority of teleworkers are men with a high educational qualification, who work in the information and communication technologies (ICT) sector and occupy a management function (Taskin and Vendramin, 2004). In addition, the majority of teleworkers live in urban areas and are not willing to lose time in commuting. Women are underrepresented among teleworkers in Belgium, as fewer women work in ICT (Eurofond, 2010).

3.2 European Union policies and regulatory framework

The issue of telework started to appear on 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. With the Lisbon European Council in March 2000, achieving an "Information Society for all" became a political priority for the European Union (van Klaveren & Tijdens, 2003).

Former Employment and Social Affairs Commissioner Vladimír Špidla called tele-work "a flexible form of work which can be reconciled with family and private life" and an "important element of flexicurity". Flexicurity is an integrated strategy for enhancing flexibility and security in the labour market. Common principles of flexicurity are following: flexible and reliable contractual arrangements; comprehensive lifelong learning strategies; effective active labour market policies; modern social security systems. The concept of flexicurity comprises a series of reflections on different social systems and their capacity to respond to the current challenges facing our society and economy, at European and at Member State level.

What are the forces creating the need for flexicurity-type solutions? Several factors are often quoted. One principal factor is the economic challenge posed by a growing global economy that is increasingly integrated and competitive. Other factors include the demographic challenge of a rapidly ageing society and the increasing feminisation of the workforce. The increasing number of women in the workforce should prompt reflection on the use of time, both working and non-working time. It may, for example, necessitate a greater individualisation of workers' rights; women should no longer have to depend on the social security rights of a "male breadwinner". At a more general level, there is a need to assess which rights are individual and which rights exist at the household level (Eurofond, 2007).

The concept of telework is also reflected in the principles of more and better jobs and better working conditions implemented by European Employment Strategy, Europe 2020 strategy and Guidelines for national employment policies. Employment Strategy was formally initiated at the Luxembourg European Council in 1997, it reflected almost exclusive focus on job creation, with very little emphasis on job quality issues. But as job creation took off in the late 1990s, the European consensus shifted towards more balanced view of employment growth. After the Lisbon Council in 2000, the European Employment Strategy placed the same emphasis on the quantitative and qualitative elements of job creation. In 2002, the Barcelona Council adopted "more and better jobs" as the motto for the European Employment Strategy (Eurofond, 2008).

There are no legislative acts issued on European Union level on telework. Implementation of telework is regulated by the European Framework Agreement on Telework signed by European social partners on 16 July 2002 (hereinafter – the European Framework Agreement). Although not incorporated into directive, it creates a contractual obligation for the affiliated organisations of the signatory parties. In the context of Article 139(2) of the EC Treaty, agreements between European Union level social partners are voluntary and autonomous in that they are not foreseen to be implemented by Council decision. The framework agreement regulates such areas – employment conditions, health and safety, training and collective rights shall be implemented in accordance with the practices and procedures specific to management and labour in the MS. the European Framework Agreement has been the first European agreement of the autonomous kind. This results in varied forms of implementation measures, and not one standard path. These agreements had previously been described as "voluntary" agreements. However, with the coming into effect of the new work programme for social dialogue 2006–2008 (EU0605019I), the European social partners changed the terminology for this kind of accord to "autonomous" agreements. The agreement recalls that teleworkers benefit from the same legal protection as employees working at the employer's premises and defines a general framework for using telework at the workplace, in a way which corresponds to employers' and workers' needs. It concentrates on the aspects that are specific to working from a distance from the employer's premises. When the framework agreement was concluded, the European Union had only 15 members. However, social partners from 10 countries who joined the European Union in May 2004, as well as Romania and Bulgaria were invited to implement the framework agreement.

The implementation process started in all countries with the translation of the framework agreement, followed by dissemination activities. As described in telework implementation report – once the translation was completed, a second step taken by the social partners in most countries consisted of carrying out information and disseminations activities vis-à-vis their affiliates to make the framework agreement known to employers and workers in their corresponding countries.

The tools and procedures of implementation chosen by social partners varied in accordance with national practices. The choice of the tools and procedures of implementation was made jointly by employers and trade unions and was often the occasion of in-depth and sometimes difficult discussions between them. The difficulty of the task was sometimes linked to issues of substance, of procedure or of the status of the implementation tool.

The implementation of the European Framework Agreement in EU member states was provided:

(1) Through national legislation in six member states – the Czech Republic, Poland, Portugal, Slovakia, Hungary and Slovenia;. (2) Through collective agreements in the majority of the countries – Austria, Belgium, Denmark, Germany, Greece, France, Italy, Luxembourg and Spain. Belgium, France and Luxembourg made cross industry agreements whereas the remaining six countries – collective agreements. (3) Through "soft law" mechanisms – social partner voluntary agreements; codes of conduct or guidance – was organized in Finland, Ireland, Latvia, the Netherlands, Sweden and the UK. It is carried out through means. Bulgaria, Cyprus, Estonia, Lithuania, Malta and Romania don't have implementation structures of the European Framework Agreement.

A detailed analysis of the forms of implementation of the European Framework Agreement in selected EU member states show that (1) In Danish public sector the framework agreement was implemented during the general collective bargaining rounds for the state sector employees in 2005. In Danish private sector the social partners amended a pre-existing collective agreement in the autumn 2005. Although some trade union and employer organizations at confederal and sector levels have implemented the telework agreement, a recent study has revealed that most affiliates of the main trade union and employer confederations in Denmark have failed to transpose the telework agreement into collective agreements. (2) In Estonia no specific regulatory framework in relation to telework has been developed, but recently definition of telework has been included in The Labour Law. Implementation of telework arrangement should be strictly voluntary for both the worker and employer. (3) France on the 19 July 2005 adopted a cross-industry national collective agreement. French employers are more conservative than others about telecommuting. (4) In Hungary the legislation appeared to be the right instrument. Framework agreement was introduced into the labour code and since May 2004 applies to the public and private sector. Legal reform has been accompanied by a public policy initiative that includes subsidies for employers who want to introduce telework. In early 2000 government subsidy programme was launched to create new jobs for various disadvantaged groups. Ministry of Labor plans to double the percentage of people working from home in Hungary by 2013. The ministry has worked out five telecommuting programmes to boost this type of flexible employment in Hungary. The government plans to spend up to 30 billion forints on such programmes using European Union funding. (5) In Italy on the 9 June 2004 social partners agreed on the interconfederal agreement at national level. This agreement is binding for almost the entire private sector and for local public services in Italy. Elsewhere in Italy the collective agreement for the public sector regulates voluntary involvement in telework. (6) In Latvia the principles of the framework agreement have been implemented through a tripartite agreement that provides non-binding guidelines on the introduction of telework; the agreement was concluded on the 12 April 2006 Employers have released guidelines for implementation of the framework agreement for their members. Social partners negotiated with the Ministry of Welfare and members of the Latvian Parliament for a set of guidelines on the implementation of telework. It is reported that compliance is poor in the case of employees working away from the company premises. (7) The Netherlands on the September 2003 issued a recommendation on the telework agreement in order to prepare for collective bargaining at sector and company level. The Netherlands also provide reduced social security contributions for employers using telework. Moreover, in 2006 the Dutch parliament agreed to waive taxation on employers' payments for the use of the internet and telephone by employees carrying out telework at home. Ministries of Economic Affairs and of Environment consider telework expansion as a solution for the countries traffic congestion problems and related air pollution. National-level soft law instruments have been supplemented by binding collective agreements at sector level for some branches. (8) In Slovenia the implementation of the framework agreement is under way, but not fully completed. Even though equal treatment is guaranteed to all employees working away from employer's premises, the use of ICT and the related peculiarities as well as possible risks of this kind of work are not sufficiently regulated. (9) In Spain since 2003 national agreements on collective bargaining have incorporated the framework agreement on telework into the Spanish labour relations system. (10) In United Kingdom the social partners and the government have agreed on practical codes and guidance directed at companies. A joint guide on telework was produced by social partners in August 2003.In the United Kingdom the government financed the publication of the joint social partner's guide on telework. Measure introduced in the UK Budget 2003 enables employers to meet some or all of the incidental household costs incurred by employees who work at home (heating, electricity, *etc.*) without giving rise to a tax charge for the employees. Court practice shows that a Telewest employee and a mother of three children has been awarded compensation of £19,500 after her bosses refused

to grant suitable flexible working arrangements to allow her to look after her baby, leading to an impasse which made her to resign her position from the company (European Social Partners, 2006).

3.3 Telework case study in Latvia

The survey covers 1244 public officials of whom 96% have worked in the public administration more than a year, 77% – more than 4 years, 60% – more than 7 years. Similar results refer to the time worked in the current institution. It allows us to consider the respondents of this survey to be well experienced in the organization of work in public administration. The average age of respondents was 39,5 years. For female respondents the average age was 39,7 years (in total 951 respondents) and 39,3 years for male respondents (in total 297 respondents); for 5 respondents data on the age were not available.

The results of the survey represented in the Figure 3 show that only 15% of respondents have been doing telework, 7% do it regularly. 7% of respondents state that their employer supports the use of telework and 6% – that internal management allows working distantly few days a week.

At the same time, 63% of respondents would like to do telework, and for 47% of the respondents it would bring additional motivation to increase their performance. However, only 30% of the respondents think that telework does not suit their professional duties. On average, 14% of respondents did not have an opinion on the questions asked.

The survey shows that 6 of 10 employees would like to use telework. For 4–5 of 10 employees it would bring motivation to improve their performance. At the same time, only 2–3 of 10 employees agree that the content of their work is suitable for teleworking.

Correlation analysis (Table 1) shows that the use of telework is acknowledged as one of the elements of flexible work arrangements. As expected, organisations that are flexible regarding the organisation of work use telework much more often than less flexible organisations.

Younger employees are more interested in teleworking and, according to their view, such option would increase their performance; they already use to work distantly time after time. However their older counterparts, although less interested in telework opportunities, more often express an opinion that it is already possible to work distantly in the organisation.

Representatives from high and medium management are more likely to use telework. The results show that they do it already much more often regularly (3–5 times a week). It corresponds to the previous researches which concluded that telework is more often performed by high qualified employees in management positions (*e.g.* OECD, 2008 and Taskin and Vendramin, 2004). However, employees in management positions are less keen on working distantly and do not think that more telework opportunities would increase their performance in contrast to specialist level employees. It suggests that additional telework opportunities should be granted to specialists who use it currently less than their counterparts in management positions.

Correlation analysis also shows that those

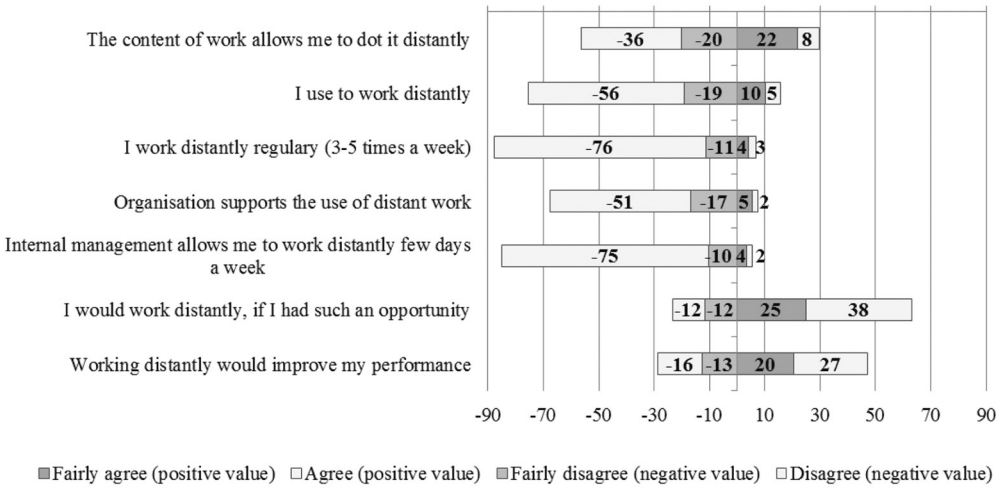

Figure 3. Results of the survey of public officials in 2012, in % (n=1244). Source: Own work.

Table 1. Results of the survey of public officials – correlation analysis (n=1244).

Indicators	The level of (5 – max, 1 – min):						
	The content of work allows me to dot it distantly	I use to work distantly	I work distantly regulary (3–5 times a week)	Organisation supports the use of distant work	Internal management allows me to work distantly few days a week	I would work distantly if I had such an opportunity	Working distantly would improve my performance
The age (years)	–0,045	–0,052*	0,020	0,020	0,054*	–0,100***	–0,101***
The position (high management – 3, middle management – 2, specialist – 1)	0,020	0,093***	0,114***	–0,021	–0,007	–0,083***	–0,095***
	The level of (5 – max, 1 – min):						
I feel satisfied with my job	0,052	0,039	0,025	0,118***	0,018	–0,124***	–0,118***
I feel beeing valued in my organisation	0,059*	0,081**	0,030	0,144***	0,116***	–0,207***	–0,203***
My working conditions are good	0,020	–0,009	–0,051	0,097***	0,035	–0,159***	–0,180***
I have flexible work arrangement	0,090***	0,157***	0,089***	0,284***	0,219***	–0,164***	–0,155***
My employer trusts me	0,079**	0,070**	0,018	0,140***	0,076**	–0,139***	–0,153***

*Significance level: * 0,10; ** 0,05; *** 0,01. Source: Own work.*

employees who use to work distantly feel more trusted and higher evaluated by their management and vice versa. Indeed, the satisfaction with work, feeling of being well valued and trusted by the employer is closely related to the support from organisation and internal management to the use of distant work.

In general, employees with more positive attitude towards their work are more interested in telework and express an opinion that more telework would increase their motivation and performance.

The five semi-structured interviews with teleworkers show a more detailed picture on their daily life, the benefits and challenges of teleworking. 4 of 5 respondents are self-employed, 1 respondent has established a company and works with 3 colleagues. 1 of the self-employed persons is also a part-time employee. 2 of the self-employed persons occasionally outsource parts of their contracts thus acting like employers. The professions of the teleworkers are tax consultant, accountant, strategic planning consultant, project consultant, database administrator. The average age of respondents is 28,8.

The respondents were given questions regarding their experience – benefits and drawbacks – of telework. They were also asked to evaluate the possibilities to establish smart work centres in regions in order to increase telework and economic activity outside metropolitan areas.

As the most important benefits of teleworking are mentioned lower costs for the premises (especially important for the self-employed and small companies) and the flexibility planning one's time. Teleworkers feel more independent, creative and productive. The main drawbacks are the loss of communication and control (especially for the employers) and the decrease in socialization. Also the absence of a working space might be a drawback when meeting with clients. Therefore some of the interviewees spend in the office few days in a week.

Regarding the regional development potential of telework most of the interviewees see the potential in establishing special offices for teleworkers in the largest towns (especially towns with universities and vocational schools) and to some extent – also in rural territories. Such centers could inter alia encourage cooperation of small businesses and lead to innovative ideas. A promising solution seems to be the creation of smart work possibilities in already working business support infrastructure, *e.g.* business incubators.

We also interviewed the founders of the first and still largest co-working space Birojnica. It is located in the center of capital city Riga and for a fee offers such services to teleworkers: work place (freely transferable table and chair), high speed wireless internet, news and business databases, tea and coffee, printing and scanning. Also for an additional fee a meeting room is available. The co-working space merges the operation of co-working space with keeping a book-store, café and lending premises for seminars and conferences. This allows them to work as a private company without subsidies.

The fulfillment of th co-working space is around 10 clients simultaneously. They are not only self-employed persons but also employees from companies who time after time want to change their working environment. Thus Birojnica also serves as "the third place" (apart from office and home) to raise the creativity. Sometimes companies place their temporary employees in co-working space, *e.g.* a programmer worked in Birojnica for a month and his employer paid the fee. Majority of Birojnica's clients are professionals from the creative industries, IT specialists, people who start their business, accountants, interpreters *etc.* The premises have been also used by the head-hunters for the tests and interviews of the potential employees.

The founders of the co-working space have thought about establishing similar co-working spaces in the regions. They see the potential in spaces that are already being used to provide other services such as libraries and schools. In order to be financially sustainable, co-working spaces also in regions should diversify their services, *e.g.* establish a café or offer premises for social activities.

Discussion

Even if the issue of telework (distant work, smart work) can be found in the European Commission's agenda since mid of 1990s the level of employees in European Union working as teleworkers is still rather low. Overall statistics shows that performing telework on part time basis is more common than full-time telework. Also data on teleworkers in member states differ. The distinctive north-south differences in the take up of telework in the Europe are clearly shown. Nevertheless, the lack of a clear definition presents a problem for measuring and comparing the incidence of telework across countries; reliable national statistics are still rare.

No legislative acts are issued on European Union level. Implementation of telework in different member states is regulated by the the European Framework Agreement, but implementation is ensured in accordance with the practices and procedures specific to management of labor in the respective European Union member state. Furthermore, the European Framework Agreement covers employed workers only. Telework may serve as a significant instrument for regional development by attracting or at least keeping people outside metropolitan areas. However, little evidence is available that local communities in the European Union are developing policies for the promotion of teleworking. It suggests that further development of policies and regulation both in European and national level is required in order to fully explore the potential of telework.

The results of the case study made in Latvia shows that there is a potential to extend the use of telework. Young people who have started their business are the first in line to become teleworkers. Working independently, they feel more creative and productive. Also public sector officials would like to be involved in telework and believe that it would increase their performance. Management level officials reveal that they already use telework regularly. Whereas younger and specialist level officials are interested in expanding telework opportunities and feel that it would bring them additional motivation and increase their productivity. In general, those employees who use to work distantly are more satisfied with their work, feel more trusted and higher evaluated by their management. It suggests that telework could help to improve performance in both public and private sector.

However, most of the employed are sceptical about the use of telework to perform their professional duties. Also the employers do not seem to be enthusiastic on the promotion on teleworking. Therefore activities for the promotion of the idea and best practice should be made (seminars, social campaigns *etc.*). As one of the examples we can mention the initiative Work Anyplace Day by the international company Microsoft.

The real benefits of telework are becoming more obvious to a large number of employers, policy makers and the workers themselves. Many now no longer see telework as a fringe activity for a few specialists or privileged individuals, or simply a question of working at home a few days a week. Instead they are starting to see how the introduction of ICTs into the workplace and into working lives is fundamentally changing all aspects of work and how organisation competes and operates across all activities and workers.

The establishment of smart work centers seems

to be an option both in and outside metropolitan areas. It could minimize the drawbacks of telework mentioned by the respondents of interviews, *e.g.* loss of socialization, the absence of working place and the lack of premises for meetings. Smart work centers could also facilitate synergies among small businesses, self-employed and employees of distant employers. The experience of co-working space in Riga proves that a smart work center can be financially sustainable if it offers also other services, *e.g.* a café and premises for events.

To establish a smart work center outside metropolitan regions seems to be a more challenging task. The proportion of free-lancers might be lower, therefore additional functions such as training and help in searching contracts might be crucial. A promising solution might be the establishment of smart work centers in the towns with universities and vocational schools where the young generation – the future high-skilled workforce – concentrates. In rural territories, smart work centers could be closely coordinated with the delivery of other public services and placed in already actively used premises, such as libraries, schools or community centers. Moreover, smart work centers could cooperate with already working business support infrastructure offering consultation and support for the business start-ups. Thus they would act as the facilitators of economic activity in the regions. However, additional research is required to offer sustainable solutions for telework and smart work centers in non-metropolitan areas.

Conclusions

We believe that telework has a potential to become an increasingly common practice of working in the 21st century. The use of telework increases the satisfaction of work and encourages the mutual feeling of trust and respect among the employee and employer. Thus telework may increase the performance in the economy. As majority of employees and employers are still rather sceptical on the feasibility of teleworking, explanatory and encouraging measures could help to foster this transition.

Telework is closely related to knowledge economy as it requires medium or high-skilled work force with well-developed abilities to plan their agenda. Knowledge economy is traditionally linked to metropolitan areas. Therefore regional development policies that support and facilitate telework could help to sustain high skilled population outside metropolitan areas and perhaps even increase the economic activity in such areas. Effectively run smart work centers could become the economic center of non-metropolitan areas linking them with the knowledge economy.

Acknowledgment

This work has been supported by the European Regional Development Fund within the INTERREG IVC project Micropol – Smart Work Centres in Non-Metropolitan Areas (No 1097R4). We thank our graduate student Anda Uzulane for collaboration in performing interviews and for allowing us to use the data from interviews in the research.

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Doručeno redakci: 23. 4. 2013
Recenzováno: 9. 9. 2013
Schváleno k publikování: 11. 3. 2014

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