OPPORTUNITY KNOCKS (Ref.17)

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Purpose: EQUINEX Project Development Partnership (DP) was a Welsh EQUAL partnership under round two of EQUAL ESF initiative, Theme A - Employability. EQUINEX DP aimed to innovatively address some inequalities faced by disadvantaged people when trying to access employment, training and educational opportunities and inclusive policies and practices within the in Wales. The purpose of this paper is to present the findings from the trans-national pilot study undertaken by the Trans-national Partnership of the EQUINEX Development Partnership, which involved the regions of: Ireland, Estonia and Wales.

The rationale for the study was to gather evidence to highlight the potential of tele-working as a away of increasing employability for a diverse workforce and to raise the profile of tele-working as a innovative way of working and promoting regional development in peripheral regions.

Design/Methodology/Approach: The paper presents the findings from a pilot comparative study of current practices and perception of tele-working in three peripheral European regions; Ireland, Estonia and Wales. The pilot study was conducted within a qualitative Action Research methodology framework, which included both secondary and primary data gathering and analysis, as well live collaborative work between the Estonian and Welsh researchers.

Findings: The research findings indicate that overall both Estonia and Wales face similar challenges regarding tele-working practices. However, each region identified complementary Tele-working policy recommendations and proposals within the overall context of Regional Development. Further research areas have also been identified by the pilot study.

Research limitations - The primary data sample was based on a total of eleven in-depth case studies from Estonia and Wales. Although this is a small sample within the context of a pilot study it was considered sufficient for the study to proceed.

Practical Implications: Good practice and knowledge exchange between European regions will inform European and regional working practices. It is anticipated that a number of Vocational European Accredited Skills Programmes will development as a result of future research.

Originality/Value: The EQUINEX Project DP took the initiative to pilot this comparative study, which was undertaken for the first time in the three regions and it aimed to inform domestic and transnational partnership work and future research in the area of Tele-working/flexible Working Patterns. It was also the first time that EQUINEX Project DP partner (Velvet Projects) hosted a trans-national researcher for a period of 10 days

Key Words: Tele-working, international, comparative, employability, regional development

Introduction

The Welsh Assembly Government's economic strategy document "A Wining Wales" emphasises that the future economic success of all our communities depends on every individual having the chance to contribute to that prosperity. Tele-working was therefore considered as an opportunity to work flexibly, aligning the needs of employees and employers whereby both groups could benefit from innovative ways of working.

The EQUAL programme initiative was launched throughout Europe, funded by the European Social Fund (ESF), and structured by the themes of employability, adaptability, entrepreneurship, equal opportunities and asylum seekers. Its aim was, through trans-national and regional co-operation, to experiment with and encourage new ways of combating all forms of discrimination and inequality faced by those groups most disadvantaged in the labour market, either in work or seeking work. The key objective of the programme was to influence regional and European policy development and implementation. Underpinning the domestic and trans-national partnership activities were the key EQUAL principles of: innovation, empowerment, equal opportunities, trans-national activities, mainstreaming and dissemination.

It is within this context and opportunity that the Equinex Development Partnership a Welsh EQUAL partnership funded under round two of the Community European Social Fund Initiative was set up. The partnership set out to address some of the inequalities and barriers faced by disadvantaged people when trying to access employment, training and educational opportunities. A key element of the initiative was trans-national work and activities, for this purpose the partnership worked with Estonia and Ireland. The partners established that tele-working was a potential employability tool of significance to all partners and as such worthy of investigation.

The Action Research Equal programme initiative presented an opportunity to conduct a pilot study to investigate and compare practices of tele-working in the three regions.

Furthermore.

According to the European Commission's Report (1998), The European Commission's first interest in telework dates from 1989. Concerns were raised in the context of the Communication Technology research programme RACE, when assessing risks of exclusion and opportunities for decentralisation arising from the economic impact of advanced communications on rural and remote regions. The European Commission picture on teleworking emerged in 1998 and highlighted four main trends in our understanding and use of telework;

Firstly, in Europe as a whole, the interest and practice of telework is increasing at a rapid rate. Secondly, it is widely accepted that telework methods and practices cannot be understood and applied successfully in isolation. Telework is increasingly seen in the context of, and applied in conjunction with, other key information society techniques.

Thirdly, the nature and role of telework vary significantly in different places and contexts. Varying aspects of teleworking assume importance in rural as opposed to urban settings; in areas of high and low employment; in areas of high and low intensity of ICT penetration and use; in large complex organisations and in small, rapidly evolving ones. There are many common lessons to be learned and issues to be addressed, but also much knowledge and understanding to be gained from awareness and analysis of differences between countries and regions as well as between organisations. Fourthly, although telework is increasing some significant operational barriers to adoption remain, which require attention from legislators, organisations and the social partners. The benefits of teleworking are readily understood and maximised in organisations that are effective users of ICTs, have confident managers and employees. Where some or all of these features are missing, telework and other innovative working patterns are either low or practised informally and without appropriate organisational support.

The European Commission in consultation with social partners on modernising and improving employment relations, started negotiations on telework on the 20th of September, 2001, which have now been approved (CEC, 2006). Telework covers a wide and fast evolving spectrum of circumstances and practices. For that reason, social partners have chosen a definition of telework that covers various forms of regular telework. The social partners see telework both as a way for companies and public service organisations to modernise work organisation, and as a way for workers to reconcile work and social life and to have greater autonomy in the accomplishment of tasks. If Europe wants to make the most of the information society and knowledge economy, it must encourage innovative, flexible forms of work patterns in such a way that flexibility and security are aligned, the quality of jobs is enhanced and the chances of disabled people in the labour market are increased (CEC, 2001).

Research Methodology

The methodology framework included both primary and secondary data collection. The study was conducted within a multi-disciplinary approach using both applied and academic research methodologies.

For the purpose of the pilot study a definition of Tele-Working was agreed between the partners; 'Working at a distance from the employer's main premises using information and communication technologies'

This excluded home working, which is usually associated with self-employed/free-lance.

The **secondary data** was extracted from the literature review of significant published materials, initiatives and relevant data that highlight Tele-Working initiatives. It aimed to identify and compare levels of good practice in Estonia, Ireland and Wales-UK. In order to frame the scope of the comparative study, the materials reviewed were not more than 6 years old, unless their significance justified inclusion in the study. The secondary provided the basis to develop the investigation framework to develop the primary data collecting tools; questionnaire and semi-structured interviews. The **primary data** was sourced from questionnaires and semi-structured interviews. These provided the basis for the regional case studies, aimed to present the Employee in-depth experience of Tele-Working / Home-Working.

The Tele-Working / Home-Working key findings were drawn from data on:

- Current initiatives in the three member regions; Estonia, Ireland and Wales-UK
- Long standing examples of good practice from; Canada, Australia, USA
- Technology available to facilitate Tele-Working and Home Working
- Companies/Organisations that have adopted Tele-Working / Home-Working policies and practices in each of the member regions
- Sectors conducive to Tele-Working / Home-Working practices in any or all of the three member regions
- Operational infrastructure/technology adopted by Tele-Workers/Home-Workers
- Barriers to Tele-Working / Home-Working Employer/Employee
- Benefits of Tele-Working / Home-Working Employer/Employee
- Sustainability and wider economic impact of Tele-Working /Home-Working

The data was gathered via:

- Regular collaborative work and consultation with regional and trans-national partners
- Desk Research Literature searches, Internet searches
- Semi-structured interviews
- Consultation with regional and European initiatives
- Regular progress updates both at domestic and trans-national levels

Although concerned was expressed regarding the validity of a small sample, it was established that within the context of a pilot study which focused on qualitative methodology it was considered sufficient for the study to proceed. Due to circumstances beyond our control the Irish partners participation was limited.

Research Stages

The research was conducted in six stages involving:

Stage 1 - Desk research

This phase of the research established current trends, practices and identified key practitioners. These findings provided the basis for the development of the questionnaires

- **Stage 2** Pilot and develop research instruments in collaboration with experts in the field (Chwarae Teg and Welsh Management Council). The questionnaires were also used to identify research participants who wanted to participate in the case studies.
- Stage 3 Digital completion of questionnaires. Telephone interviews. Case studies.
- **Stage 4** Hosting Estonian researcher in Wales for 10 days to; conduct primary data analysis and merge Estonian and Welsh data
- Stage 5 Estonian and Welsh authoring of Final Pilot Study Report

Stage 6 - Dissemination of findings in Brussels, Estonia and Wales

Research Findings

The study found that whilst there is no shortage of global studies investigating the merits of teleworking from both the employer and employee perspective, there is lack of region specific data from the regions of Estonia and Wales.

There is substantial empirical evidence regarding the merits and the challenges of implementing teleworking policies within organisations. Furthermore, the data also provided insight into a number of key factors that converge and make strong cases for the adoption and implementation of teleworking:

- the Social Case
- the Economic/Business Case
- the Environmental Case
- the Technological Case

The Social Case for Teleworking

The social case is underpinned by the elements of equal opportunities for all, empowerment of individuals, communities and regions.

The findings from the primary and secondary data show that teleworking presents enormous potential to contribute to:

- The Work Life Balance
- Provision of employment creation in isolated communities (rural and peripheral)
- Support for innovative, flexible ways of working
- Increased employment opportunities in older workers
- Increased employment opportunities for disabled groups

Economic/Business Case for Teleworking

There is a vast body of evidence in support of the economic/business case for implementing teleworking practices as a tool to sustain and grow the competitiveness of rural and peripheral areas via:

- Promotion of Regional Development and Regeneration
- Contributing to the Lisbon agenda
- Integration of teleworking as a strategic management tool to increase competitiveness, productivity and profitability
- · Technology being a driver for innovation and competitiveness
- Opportunities to counter-balance skill shortages by sourcing staff from a wider distance
- Accessing global markets
- · Considerable savings on office space

Technological Case for Teleworking

Competitiveness and innovation between technology providers has greatly contributed to "any time, any where" working practices. Consequently, individuals and organisations are embracing technology as an empowering tool, which allows them to:

- Access global data and information away from the office
- Access employment
- Able to communicate with a group of people in real time
- Participate in society
- Have a lower cost of access to internet and broadband
- Have access to digital communication and transactions 24hours a day, 7 days of the week, 365 days, also known as 24/7-365
- · Provide business continuity in case of natural disasters and terrorism

Environmental Case for Teleworking

There is extensive data to substantiate the fact that there are considerable environmental benefits to this innovative working practice, which can significantly:

- Reduce traffic congestion
- Cut commuting traffic
- Reduce CO2 emissions
- Reduce the demand for new roads or expanding existing ones
- Affect transport planning

The cases cited in favour of teleworking tend to be considered in isolation, however if considered together, the study findings suggest they are likely to trigger a multiplier effect of significant proportions.

Teleworking against the Background of ICT Development - Estonia

The findings show that Estonia has taken significant steps towards the information society. Over the past decade Estonia has witnessed the expansion of the availability of Internet access, high-quality IT solutions and e-services. The successful development of ICT infrastructure has been driven by the innovative mindset both in the public and private sector. The Estonian Information Society Strategy 2013, a sectoral development plan, states that up to the present day, information policy related activities in Estonia have laid great emphasis on developing ICT infrastructure and systems necessary for implementing sectoral policies.

In Estonia, for its 45,000 square kilometres surface area, wireless Internet access is available in nearly 900 wi-fi hotspots. Wi-fi can be used in many public places, including commuter trains, and usually the service is free. The government has also initiated a target programme Village Road 3, with an objective to increase the availability of broadband Internet in rural and scarcely populated areas, where the private sector has no interest to invest. By the end of the programme, the penetration of broadband in remote areas will be as high as that in densely populated regions.

According to the data obtained by Work Life Barometer 2005, the use of information technology is widespread in Estonian companies. In 2005, 42% of workers were using a personal computer, 35% were using email, 38% used the Internet and 46% used a mobile phone. The most recent Global Information Technology Report (2007) presents the Networked Readiness Index where Estonia ranks 20th. In the category of availability of e-services Estonia holds the first place among 122 states. For a small country with limited resources, like Estonia, it is crucial that the advancement in the ICT domain be used for the benefit of society and development of knowledge-based economy. The Estonian Information Society Strategy 2013 suggests that more focus needs to be placed on the development of citizen-centred and inclusive society in order to enhance the overall competitiveness of the society. For this purpose, the given policy document delineates the general framework, objectives and respective action fields. Among other activities, flexible work arrangements will be facilitated - the barriers to teleworking will be identified and appropriate solutions will be developed to overcome these. At the moment in Estonia there is no pressure on companies to introduce teleworking and there is no public policies in place to increase the share of teleworking. However, on the basis of the previous ICT related achievements it can be said that that Estonia provides a conducive environment for implementing flexible work arrangements, including telework. It is widely agreed that the practices of teleworking can be a powerful instrument for achieving balanced and sustainable economic and social development.

Telework can promote social inclusion by providing work for people who might have difficulty in travelling to and/or working in a local office, or who live in remote areas with limited local work opportunities. The link between teleworking and higher community participation supports the argument that teleworking can be a good solution for stabilising social structure and the quality of community life in geographically disadvantaged regions.

It is obvious that teleworking is not a recent phenomenon and it has been used for a number of years – although usually organisations have no policies to regulate the practice of homeworking or teleworking and it rather takes place on an ad hoc/informal basis.

In Estonia, the most comprehensive (and also, pioneering) survey on teleworking was carried out by Ariko Marketing in 2002. Telework was defined as working away from the employer's premises using the means of ICT. Of the 300 companies that were interviewed, 22% had used teleworking over the last ten years. The figure was higher among small companies with fewer than 10 employees, in business and ICT sectors and in Tallinn, the capital city.

According to the survey findings, 91,7% of the workforce had never used teleworking, 4,8% had teleworked before but were not doing so currently. Only **3,5% of the working population were teleworking**, with 40% of full time teleworkers and 60% of occasional teleworkers.

Teleworking rates were highest in sales and customer service occupations and in accountancy. The majority of teleworkers were men. In 2002, the teleworking rate for men was 30% higher than that of women. In 85% of the cases teleworking was done on the employer's initiative.

Wales

In Wales, Chwarae Teg the organisation with the role to promote Work Life Balance and Women's Economic Development has been instrumental in taking public sector and SME's through the process of piloting and implementing Home Working Policies and flexible working practices. For the purpose of this study, Hayley Dunne - Business Development Manager at Chwarae Teg shared her first hand knowledge on the current practices amongst a number of Local Authorities in Wales:

- In Bridgend Borough Council they have a tailored programme whereby they have taken away the core hours and expanded bands. This was achieved through attitudinal change, checking individuals' perception versus the reality and independent guidance.
- Cardiff City Council is implementing a blended approach including both teams (bottom up) and Corporate (top down).
- Wrexham Council Work Life Balance Package has resulted in the Planning Department being available to the public from 7.00 am to 7.00 pm, therefore greatly extending their service.
- Neath Port Talbot Council, is a great example of an authority that had a very sceptical
 approach to flexible working practices. However, with the independent expert guidance from
 Chwarae Teg, which is driven by the business benefit they are now converted to its benefits.

Hayley remarked that the fact that the programmes are driven by the business case and independent input and support has been critical to its success. It was also remarked that language plays with perception in the initial stages of giving consideration to flexible working practices and much work is done to keep the process objective and business focused.

A key benefit and opportunity is the ability to reverse local and regional skills leakage.

In the process of conducting this study it has become apparent that there was a considerable amount of informal homeworking taking place in Wales. The evidence also suggests individuals perception of Teleworking may lead to them not self-identifying as Teleworkers.

Overall, there is a lack of recorded qualitative data regarding the scope of home working and teleworking practices and the profile of teleworkers in public sector in Wales.

According to the ONS (2005) the characteristics of Home workers and Teleworkers in 2005 were as illustrated in Table below:

	All In employment	Home workers mainly in own home	Home workers using home as base	total	Tele workers mainly In own Home	Tele workers using home	total
Men	53	36	79	101ai 68	41	as base 78	10tai 65
Women	47	64	21	32	59	22	35
Employment status	47	04	۷۱	32	39	22	33
Employee	87	32	35	34	34	37	36
Self-employed	13	62	64	64	62	63	62
Unpaid family worker	0	6	1	2	5	1	2
Full-time	72	49	79	72	53	81	72
Part-time	28	51	21	28	47	19	28
Occupation (SOC,2000)	20	31	۷۱	20	41	19	20
	16	19	14	16	23	22	23
Managers and Senior Officials			12				
Professional occupations	13	14		13	16	19	18
Associate Professional and Technical	17	23	15	17	26	21	23
Administrative and Secretarial	7	22	2	7	22	3	10
Skilled Trades Occupations	27	5	34	27	3	25	17
Personal Service Occupations	7	12	5	7	7	2	4
Sales and Customer Service	3	2	3	3	2	3	2
Occupations							
Process Plant and Machine Operatives	6	2	8	6	1	3	2
Elementary Occupations	5	1	7	5	0	2	1
Total (thousands) = 100%	28,049	768	2,324	3,092	603	1,774	2,377

Characteristics of Home workers and Teleworkers

The ONS data shows that the key occupations of teleworkers, primarily working from home, are:

- Associate professional and technical
- Managers and senior officials
- Administrative and secretarial

Given the multi-dimensions of Teleworking in the figure below, at present there is a very active interest in exploring its scope at UK/EU and global levels.

CROSS CUTTING THEMES

Flexible Work Patterns	Economic Development		
Work Life balance	Planning, Land Use & Development Control		
Education & Skills	Housing		
e-Work / e-Inclusion	Sustainable & Growth of Communities		
Equal Access to Opportunity	Transport Policy & Traffic Management		
Equal Access to Opportunity	Transport i oney a Traine management		
Economic Inclusion	Environmental Impact		

Telework increases access to information for remote communities, creates jobs in regional areas, enhances opportunities for the self-employed, allows people to find a better work-life balance and provides new hope for those with disabilities. The benefits of teleworking are evident on a micro and macro level, for governments, businesses, institutions, communities and individuals.

For many businesses, it can simply enable smarter – and more profitable – ways to structure their operations. With people teleworking it is possible for even a small company to have representatives in distant locations serving local markets, without enormous office overheads, but with access to all the same information and instant communication necessary to be effective, (NOIE, 2003).

The environmental potential is not being fully realised. Some pioneering companies such as BAA, BT and Sun Microsystems are promoting it through either company policy or their products. But there is no systematic approach from government to encouraging telework.

- The UK government's sustainable development strategy was being reviewed in 2004/5. In the
 original 1999 strategy there was very little reference to the use of ICT to reduce
 environmental impacts and promote social and sustainable economic development.
- The 2004 transport white paper promises investment in new transport infrastructure, including new roads, and discusses the possibility of traffic suppressing measures such as congestion charging and motorway tolls. But there is no promise of investment to reduce the need to travel, through the applications of ICT such as telework.
- Recent new building regulations from the office of the Deputy Prime Minister aim to reduce
 the energy consumption of new buildings. But the regulations do not require the incorporation
 of ICT infrastructure that would help change householders' behaviour and facilitate telework.

The Department of Trade and Industry (DTI) recently produced guidelines on telework for companies and employees. The guidelines address issues such as health and safety, and personal support and security in the home for teleworkers, but do not address the environmental role that telework can play.

Country Specific Policy Recommendations and Proposals Estonia - Policy Recommendations and Proposals

Based on the progress made in the ICT sector, the government should consider adopting
decentralisation strategies and policies, which would contribute to a more balanced and
sustainable regional development by creating employment opportunities in peripheral and
disadvantaged areas. Similar policy initiatives have been proposed in other countries,

- including Ireland where the government made a decision in 2003 to move a number of civil service offices out of Dublin to other towns throughout the country.
- The government should take the lead in raising awareness on the social, economic and environmental benefits of teleworking by conducting campaigns aimed at employers.
- The decentralisation strategy should be supported by government policy on the
 establishment of telecentres in rural and peripheral areas. The benefits of telecentres should
 be acknowledged and public investments should be directed towards the development of
 telecentres.
- The government departments and publicly funded organisations should take the initiative to introduce teleworking options into their mainstream working by launching pilot programmes and developing teleworking policies. Teleworking (e-Working) pilot projects in the public sector would set an example for other organisations.
- Develop a nationally recognized teleworking (e-Work) training programme to be targeted at both employees and employers/managers.
- Conduct research and impact evaluation on teleworking (e-Work) programmes and initiatives.

Wales - Policy Recommendations and Proposals

- Government to further encourage and widen support to Technology Assisted Employment Initiatives such as expansion of the Access to Work programme.
- Government to raise the profile of teleworking as a mainstream strategic business tool to enhance competitiveness and growth of rural and peripheral regions.
- Government to explore the feasibility of providing employer incentives to adopt teleworking practices at a regional level.
- Government to explore the feasibility of providing incentives and support for teleworkers to form cluster networks.
- Research the "push-pull" factor in teleworking (is teleworking a choice or is it imposed?).
- Research the spatial/temporal patterns of teleworking.
- Conduct comparative research of teleworkers with and without disabilities.
- Teleworking initiatives in the public sector to be role models for other organisations.
- Identify teleworking champions from employers and employees to raise awareness of the benefits of teleworking.

It is apparent that there are a number of similarities between Estonia and Wales regarding the implementation of teleworking practices.

It is likely that these similarities may also be issues for other European regions addressing real life challenges to employability and employment in today's competitive global economy.

Key References

Ariko Marketing (2002) Infotehnoloogia, telekommunikatsiooni ning kaugtöö kasutuse mõju tööhõivele : kaugtöötamise uuring : ettevõtete kvalitatiivintervjuud, elanikkonna pilootküsitlus. Tallinn. (The Impact of Information and Communication Technologies and Telework on Employment)

Bibby, A. (1999) How Kent County Council is developing flexible ways of working. Flexible Working.

Bibby, A. (1999) How the Nationwide Building Society is implementing telework. Flexible working.

Buckley, C. (2006) Teleworking on the rise among Irish SMEs. Sonicwall.

Cairns, S., Sloman, L., Newson, C., Anable, J, Kirkbride, A. & Goodwin, P. (2004) Smarter Choices – Changing the way we travel: Teleworking. Final report to the Department of Transport London, UK.

CEC (2001) Lisbon Strategy/Framework agreement on telework. Confederation Europeenne des cadres.

CEC (2006) First stage consultation of European Social Partners on Reconciliation of Professional, Private and Family life. Brussels, October 12. Commission of the European Communities. Commission of the European Communities (2005) Commission staff working document. E-Inclusion

revisited: The Local Dimension of the Information Society.

Corbin, T. (2006) Mobile and Teleworking initiative for a smarter south east, pilot trail....findings and recommendations. Working for a successful economy in Hampshire. Hampshire County Council Economic Development Office. November.

Department for Transport (2005) A Guide to Teleworking: How to increase your business efficiency. Transport energy, best practice United Kingdom

Department of Transport (2002) Transport Trends 2002

DTI (2003) Telework Guidance. Department of Trade and Industry Report.

Earls, S. (2006) Teleworking and Virtual Teams: Embracing ICT to work flexibly & competitively.

Estonian Information Society Strategy 2013. Ministry for Economic Affairs and Communications. Published 30 November 2006.

European Social Partners (2006) Implementation of the European Framework Agreement on Telework. Adopted by the social dialogue committee.

Gundry, J. & Slater, S. (2005) Flexible Working: Can home workers and their managers make it work? A knowledge ability white paper.

Hislop, D. & Axtell, C. (2007) The neglect of spatial mobility in contemporary studies of work: the case of telework. New technology, work and employment 22:1

NOIE (2003) Broadband Teleworking. National office for the information economy, Australian government.

Personalijuhtimise uuringu Cranet aruanne Eestis 2004, Estonian Business School, juhtimise õppetool. (The Cranet report on human resources management in Estonia)

Philpott, J. (2006) Teleworking: trends and prospects. CIPD.

Tietze, S., Musson, G. & Scurry, T. (2004) Homeworking in Local Authorities – Issues and Considerations. ESRC- Economic & Social Research Council.

Tööelu baromeeter 2005: elanikkonna uuringu aruanne. Saar Poll OÜ; tellija EV Sotsiaalministeerium. Tallinn, 2006. (Worklife Barometer 2005)

UK National Statistics (2005) UK homeworking statistics and trends. Labour markets trends, October.

WAG (2002) Work Life Balance, a better way of working and living. Welsh Assembly Government.

Walls, M. & Safirova, E. (2004) A review of the literature on telecommuting and its implications for vehicle travel and emissions. Resources for the future. Discussion paper 04-44.

Williams, L. (2006) Museum rolls out remote working. Computing 18th May.

WMC (2003) Management and e-Business. Welsh Management Council.