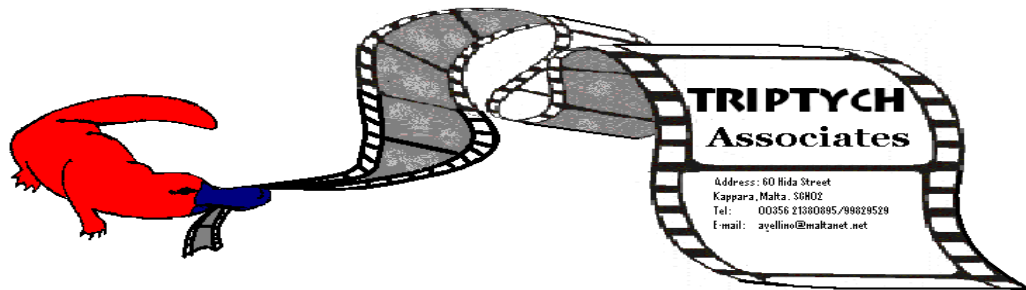


An Enabling Framework for Telework

Research Project
for
The Employment and Training Corporation, Hal Far

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EXECUTIVE SUMMARY

The shift to a digital knowledge-based economy was marked in Europe by a report on the status of “eWork” development. The beginning of this new phase in Europe was ushered in with a new common policy framework: the agreements at the Lisbon Summit in March 2000, when it was agreed to make Europe “the most competitive and dynamic knowledge-based economy, capable of sustained economic growth with more and better jobs and greater social cohesion”.

Since then substantial progress was made towards this goal through implementation of the e-Europe Action Plan agreed to in June 2000. Part of the broader scope of eWork included the continued development of Telework, with its proven benefits of flexibility in time and place.

In Malta too, awareness and interest is growing in new working practices which have mainly come about due to technological advances especially in the ICT sector. Participation in new working practices, with particular reference to Telework will only come about:

1. By evaluating the status quo in Malta and beyond our shores
2. A wide dissemination of information about the subject especially relating to Best Practice
3. Debate and consensus building amongst stakeholders and social partners
4. Successful pilot studies or case studies
5. Acceptable and Enforceable Controls

The ultimate aim of this report will be to recommend national reforms which will be needed for Telework to become a feasible option for persons and organizations wishing to use it.

ABBREVIATIONS

ATTRACT	Advanced teleworking techniques for insurance agents and customers
CEC	European Managers Confederation
CEEP	European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest
CEMR-EP	Municipalities and Regions Employers' Platform
ECATT	Electronic Commerce and Telework Trends
EPSU	European Federation of Public Service Unions
ETUC	European Trade Union Confederation
EUROCADRES	Council of European professional and managerial staff
IST	Information Society Technologies
NAP	National Action Plan (Malta)
SIBIS	Statistical Indicators Benchmarking the Information Society
SUSTEL	Sustainable Teleworking
TW	Telework
UEAPME	European Association of Craft, Small and Medium Sized Enterprises
UN	United Nations
UNICE	Union des Industries de la Communauté européenne

Chapter 1

Introduction

Situation: The European Employment Strategy set common objectives for Member States of the European Union to pursue their employment policies, based on the three overarching objectives:

1. full employment;
2. quality and productivity at work;
3. cohesion and an inclusive market.

As a member of the European Union, Malta's aim is to achieve these objectives and this research aims to evaluate the possibility and extent that Telework could become a contributing factor to achieve these goals.

The primary audience for the research will initially be the Employment and Training Corporation; however it is hoped that this will also serve as a handbook or manual for employers, human resources departments and senior managers across companies and other business organisations in the private sector. It should also be particularly useful as a reference guide to individuals who wish or have embarked on a career which will in whole or in part include telework as an option.

Development of Telework

One of the early definitions of telework originating from the US regarded it as, '*any form of substitution of information technologies (ex telecommunications, computers) for work-related travel*', that is to say that telework was viewed as "*moving the work to the*

*workers instead of moving workers to work.*¹” This means that under this approach telework was seen essentially as a way of working at a remote distance from the traditional workplace.

Since then the European Commission’s E-Work 2000 Status Report² identified three main categories of telework:

- home-based telework,
- mobile telework and
- telework by self-employed Small Office/Home Office (SOHO) workers.

The view of teleworking in this document shifts the concept to one of working above a set minimum number of hours per day or week away from the place of employment, whether this be at home or elsewhere, through the use of information technology. This document also brought to the fore how ‘telework centres’ or ‘satellite’ offices of entities covering large geographic territories contribute to reducing problems of commuting (especially in large urban centres).

Since this report was presented, discussions and developments took place between the central EU level social partners (UNICE, CEEP and ETUC) leading to the publishing of a Framework Agreement on telework in 2002. The definition which will guide our research will be based on this agreement as this will have implications on various issues, *inter alia* on employment conditions, health and safety, training and collective rights. For this reason it is being attached as APPENDIX I, page 86.

¹ Nilles, J., 1998

² Pgs 26-27

Defining Telework

The importance of defining Telework is paramount as it will come to bear on the way we frame all our research questions, method of enquiry and data collection.

The basic concept of Telework has in fact been with us for a long time, perhaps dating back to the concept of ‘telecommuting’ that appeared in the mid-1970s. In fact Nilles (1975) had defined ‘telecommuting’ as “*Periodic work out of the principal office, one or more days per week either at home, a client’s site, or in a telework centre*”³ after which telecommuting or telework re-appeared with various agendas in the 1980s and 1990s⁴.

In America, for example it was seen as a

*“contributor to policies supporting transportation, energy independence and conservation, improvement of air quality, employment for people with limited mobility (disabled, retired, low income, single parent), rural economic development, global competitiveness of American business, effective health management, the American family and increased community involvement.”*⁵

*“In the private sector in America, it also addressed a variety of agendas as it offered the potential for improved productivity, recruitment, retention, savings in space costs, and other benefits.”*⁶

In recent years with the increased availability and use of new ICT hardware and support such as mobile telephony, internet, wireless connectivity, and broadband, European policy makers are convinced that teleworking will become a socially and economically important mode of work⁷.

³ Nilles, 1998, p 1

⁴ Haddon and Lewis, 1994

⁵ Mokhtarian, Patricia L. "Telecommuting in the United States: Letting Our Fingers Do the Commuting." TR News, Vol. 158, January-February 1992, pp. 2-9.

⁶ Sampath, Srikanth; Saxena, Somitra; and Mokhtarian, Patricia L. The Effectiveness of Telecommuting as a Transportation Control Measure. Institute of Transportation Studies, University of California, Davis. August 1991

⁷ eEurope 2005: An information society for all, May 2005. COM (2002) 263

In a paper submitted by Wilson and Underwood⁸ from the University of Technology, Sydney, they write that

“Teleworking according to Kraemer⁹ refers to the use of information technology to perform job-related work at a location remote from the normal office, often at home, at times independent of normal office hours. Teleworking is also known as telecommuting by Nilles¹⁰, industrial homework by Lewis¹¹, homework by Slatta¹², and home-distributed data processing¹³”.

Whilst 'remote work' is a generic term for "organizational work performed outside of the normal organizational confines of space and time", telework specifically refers to "work performed remotely augmented by computer and communications technology"¹⁴.

So what is teleworking?

As we have noted, definitions of teleworking are many and varied. They are dynamic as they also reflect the changes that take place in society and in technology. The European Commission proposed a definition of telework as:

“a method of organising and/or performing work in which a considerable proportion of an employee's working time is: away from the firm's premises or where the output is delivered; and when work is done using information technology and technology for data transmission, in particular the internet”¹⁵.

⁸ Wilson, D.N, Underwood J., 28-30 March 1995 , *Teleworking : A Place for the Introvert?* paper presented at ETHICOMP95, deMontfort University, Leicester, UK
<http://linus.socs.uts.edu.au/~jim/papers/telework.html>

⁹ Kraemer, K. L. 1982, "Telecommunications Ð Transportation Substitution and Energy Productivity: A Re-Examination" *Telecommunications Policy*, 6(1), March 1982, pp 39-59

¹⁰ Nilles, J. M., Carlson, F.R., Gray, P. & Hanneman, G. G, 1976 *The Telecommunications - Transportation Tradeoff* John Wiley and Sons

¹¹ Lewis, M.,1984, "If you worked here, you'd be home by now" *Nation's Business*, April 1984, pp 50-52

¹² Slatta, R.,1984, "The Problems and Challenges of the Computer Commuter" *Link-up*, June 1984, pp 36-9

¹³ Viewpoint, 1984 (column), *Data Communications*, May 1984, p 13

¹⁴ Olsen, M.H. 1991 "Information Technology and the Where and When of Office Work : Electronic Cottages or Flexible Organisations?" published in Clarke, R. & Cameron, J. (eds) *Managing Information Technology's Organisational Impact* Elsevier Science Publishers (North-Holland), pp 3-14

¹⁵ eWork, 2001, p11

This is a general definition, though it does not explicitly include the self-employed. The ECaTT¹⁶ definition of home-based teleworking requires the following:

- work from home at least one full day per week
- use of a PC for this work
- use of the phone, fax or email to communicate with colleagues from home
- that teleworkers are either salaried or self-employed

People with the same pattern of work at home but who spend less than a full day per week teleworking are called ‘occasional’ teleworkers.

There are three elements to this definition: technology, intensity and location. The first, technology has two functions: performance of the work and communications. Intensity here means frequency and duration. The location component distinguishes between work at the workplace, at home, or at varying places. The Office of National Statistics (ONS) definition used in the British Labour Force survey has the same distinctions but treats them differently. Teleworkers are paid or unpaid workers who use a phone and a PC, whether they work at home full-time or occasionally (at least one day in the reference week). A narrower group called TC teleworkers, for whom a telephone and a computer are essential for their work, is also defined.

We start the analysis presented in this report by defining home-workers to be those in paid work only, and who do paid work at home. It is possible then to define teleworkers to be a subset of home-workers who use information and communications technologies

¹⁶ European Commission (2000b), *Employment Strategies in the Information Society. Communication (COM (2000) 48 Final)*, Brussels.

(ICTs) in their work. However it is not clear which 'ICTs' should be included – PCs? Internet? Mobile phones? Fax? Fixed line phones? There is no clear consensus on this issue and therefore any analysis is governed by the research issues it wishes to address. Way back in 1989 Brocklehurst had suggested we reserve the label 'telework' for those homeworkers who use new technology. Given the focus of e-Living on those technologies whose impact is least understood and on those predicted to grow most in penetration, we have chosen to define teleworkers as those **home-workers who use PCs and/or the internet, or a mobile phone, during this work**. We also distinguish between these forms of technology, which adds a further level of detail to the final classification.

In respect of intensity of teleworking, there are several reasons for being interested in teleworkers and whether or not they telework full-time or in non-standard working hours. First, it might give an indication of the potential employee demand for full-time ICT mediated work done from home. Second, it gives a more realistic indication of the demand for ICT facilities needed to work effectively from home. Third it enables a more complete analysis of the effects of home-working of any kind on the lives of the workers and their households.

This definition locates telework at home, using various technologies or services (the net, a PC or the mobile phone), and where this is undertaken full-time or otherwise. We could use various elements of e-Living dataset to build a classification of work, including categories for homework and telework based on the above definitions.

However this definition leaves out the tele-workforce who uses other premises or venues for their work, other than what is considered a normal place of work. Workers who use internet cafes, church halls, cars, planes or other locations would be exempt from the telework definition. So we must search elsewhere for a more suitable and encompassing definition and the best place is to refer back to the ‘father’ of telework, Jack Nilles.

Nilles, Telework and Telecommuting

Nilles is sometimes referred to as the father of telecommuting as the coining of the terms telecommuting and teleworking are attributed to him back in 1973 during the first documented pilot telecommuting project. Nilles organized and led an interdisciplinary team at the University of Southern California to develop and test telecommuting in a real-world environment. The book resulting from the project ‘*The Telecommunications-Transportation Tradeoff: Options for Tomorrow*’, explored all of the main issues associated with telework and telecommuting was published in 1976. It was an enormous success as it set the ground work of what has become one of the greatest change agents for strategic attainments.

According to Nilles¹⁷, Telework is:

‘ANY form of substitution of information technologies (such as telecommunications and computers) for work-related travel; moving the work to the workers instead of moving the workers to work’

The definition used more recently by Nilles¹⁸ is:

¹⁷ Nilles, J, *Managing Telework*, 1998, pg.1

'ANY form of substitution of information technologies (telecommunications and computers) for work-related travel.'

At first glance we may be forgiven for thinking that these are 2 identical definitions, however, the more modern definition leaves out the explanation about moving the work to the workers instead of the workers going to work. This is done with a purpose, as we are now faced with increasing global competition, coupled with the toppling of telecommunications regulatory barriers. There has to be more awareness that many forms of work are independent of the locations of either the worker or the employer. The locus here is the output or result that is produced by the worker (not necessarily an employee) and not the work being provided by an employer at another place of work (for example in the home). This is essential as it is directly linked to management issues such as remuneration (which is traditionally based on the amount of hours a worker spends at a workplace) or Management by Objectives which could be one of the forms that management will use to base its remuneration policies upon.

Telecommuting

In the early years Nilles's research¹⁹ concentrated on telecommuting as a way of achieving a *reduction or elimination of the daily commute*. The following two definitions are used in the JALA website²⁰ of whom Nilles is the co-founder and president.

¹⁸ www.jala.com/faq.php, last updated 5 February 2004, last accessed 29 October 2004

¹⁹ www.jala.com/faq.php, last updated 5 February 2004, last accessed 29 October 2004 and Nilles, J, *Managing Telework*, 1998

²⁰ www.jala.com/history.php last updated 5 February 2004, last accessed 29 October 2004

***Telecommuting:** that portion of teleworking that applies to the daily commute to and from work-a primary source of traffic congestion, air pollution and loss of productivity in urban areas²¹.*

Telecommuting: moving the work to the workers instead of moving the workers to work; periodic work out of the principal office, one or more days per week either at home or in a telework center. The emphasis here is on reduction or elimination of the daily commute to and from the workplace.

Telecommuting is a form of teleworking; all telecommuters are teleworkers but not all teleworkers are telecommuters. Also Nilles²² envisions telecommuters as generally being employees of some organization, as contrasted to people with home-based businesses.

Telecommuting or Teleworking?

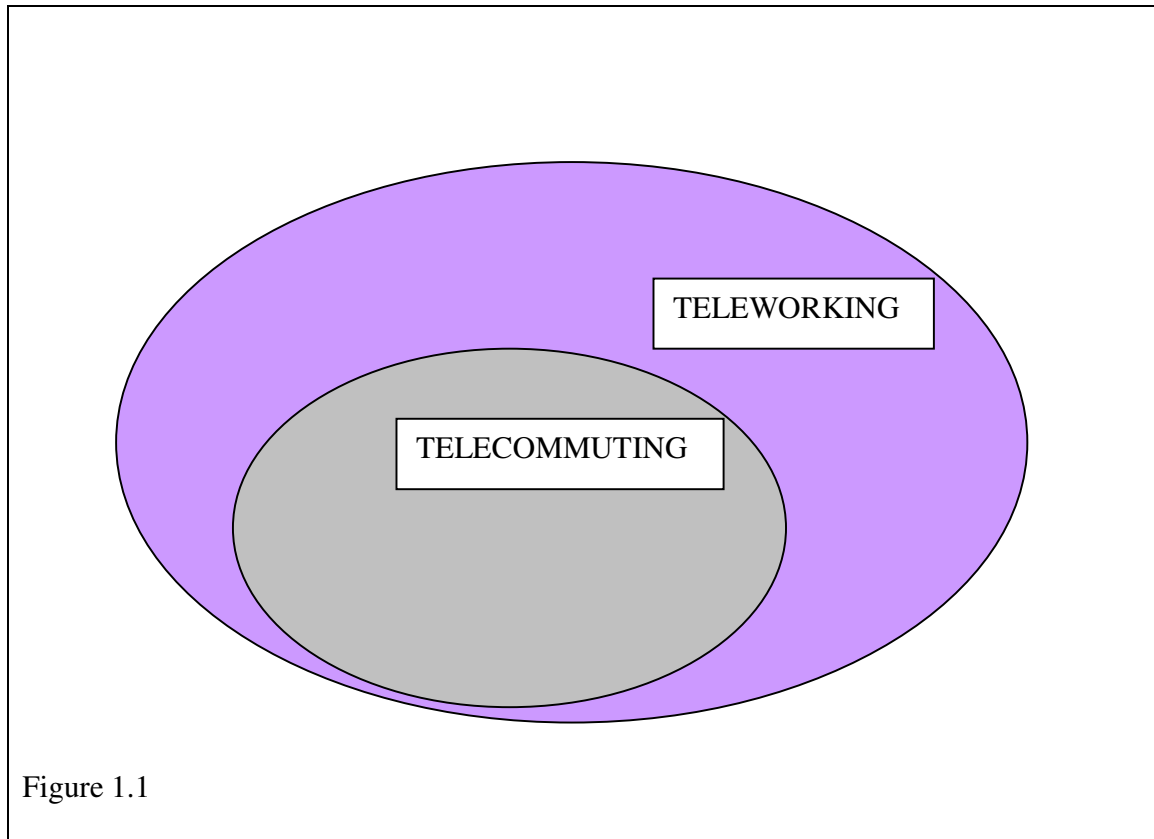
Telecommuting is a form of teleworking.²³ Telecommuting means using telecommunications to replace commuting between home and work. Telecommuting is the substitution of information technology for the commute to and from work. The term teleworking means telecommunications-enabled rearrangements of where workers are located. Telecommuting, where employees work at home instead of in their usual office, is a small part of telework. Mobile sales forces and suburban data processing facilities are more prevalent examples of telework and can include such variations as home-based businesses that use telecommunications to work with their customers, as well as those who may commute every day to some traditional location but use information

²¹ www.jala.com/history.php last updated 5 February 2004, last accessed 29 October 2004

²² Nilles, J, *Managing Telework*, 1998, pp 125-134

²³ Nilles, J, *Managing Telework*, 1998, pg 16

technologies to deal mostly with people in other cities, states, or countries.²⁴ The two are related as shown in Figure 1.1 and the variations of telework are outlined in Figure 1.2



To sum up, in telework, work is moved to the workers rather than moving workers to the work. By contrast, telecommuting is a form of telework in which one periodically works away from the principal office, one or more days a week, either at home, a client's site, or in a telework centre or satellite office. Telecommuting emphasizes reduction of work-related travel, whereas telework more broadly emphasizes the flexibility to work anywhere, anytime.

²⁴ ²⁴ www.jala.com/faq.php, last updated 5 February 2004, last accessed 29 October 2004

Figure 1.2 Telework variations.

Typical home telecommuter: Employee regularly stays at home and works, usually no more than two days per week.

Full-time home telecommuter: Employee routinely works from an at-home office or workstation within the same metropolitan area as the normal office and travels only once per week or less frequently to the normal office.

Telecentre/branch telecommuter: Employee works for reasons of convenience and travel-saving at a different facility provided by the employer but retains a desk in the normal office.

Telecentre/branch workers: People who are reassigned to working regularly and routinely from a remote telecentre or branch office somewhere else in the metropolitan area, their normal office being eliminated, downsized, or shared.

Virtual office worker: Employees who are provided with home or portable office equipment and have their normal office taken away because they spend the vast majority (typically 80% or more) of their work time in the field.

Long-distance telecommuters: People who would have a company office with the rest of their work group if they lived nearby but instead are allowed to work from a distant residential location because their employer wishes to retain them. They may report to a more convenient branch office, work from a home office, or do both.

Mobile professionals: People who usually have a normal office to which they officially report to work but who are able to work continuously with location independence because of extensive travel requirements inherent in job responsibilities. Includes travelling sales people, field auditors, trainers, and maintenance technicians.

Independent homeworkers: Self-employed people or business owners who could have an office outside of the home but who choose not to and instead work routinely from an office at home. Also called "lone eagles" (Burgess, 1992).

Remote regional field workers: Employees assigned to cover a geographic area that is remote from the main office of their supervisor, so they are required to work from home, a branch office, a rented office, or some combination.

Decentralized work groups: All of the employees in a work group are reassigned to another employer-provided facility in a different part of the metropolitan area from the normal office.

Remote branch/back office: Rather than expand the staff and space at the normal office, the employer establishes a new office in a remote location. The employer transfers existing employees to live and work in the new location or else hires new people who already live nearby.

Source: Nilles, John, September 1994, Beyond Telecommuting: A new Paradigm for the effect of telecommunications on travel, Chapter 1, http://www.lbl.gov/ICSD/Niles/NilesChap1_4.html

Chapter 2

Literature Review

Framework

There is an abundance of literature about telework²⁵, so much so that there is a “much quoted adage”²⁶ about more people doing research on telework than there are people actually teleworking. For this review we will be focusing upon the research conducted in light of the European Union and its strategy in pursuing positive employment policies.

Developmental overview - European Union context

The first stirrings of interest in the concept of Telework in the European Union were addressed in a strategic analysis undertaken by the DG for the Information Society (formerly DG XIII) in liaison with the DG for Agriculture (Formerly DG VI) This was initiated in response to the European Commission’s raised concern in 1989 about the risks of exclusion and opportunities for decentralisation arising from the economic impacts of advanced communications on rural areas and remote regions. At that point the analysis had identified telework as a potential contributor to broader employment

²⁵ For example the Telework Week was launched in 1995, and ran every year until 2002. During this time there were:

Over 500 events, attended by over 60,000 people

Over 1000 press articles, published in national, regional, and specialist publications

Programs and interviews about telework, broadcast on national, regional and international TV and Radio

In later years the conference was renamed Telework World to reflect the international nature of some of the key speakers and the fact that the event was established as the major European conference during European Telework Week. The conference was aimed at a business audience and people interested in the practicalities of implementing flexible working rather than just being an academic subject. It covered three main areas of interest: the way that technology is developing and impacting remote working, the management and human issues, the property, environment and transport issues. More than 150 expert papers have been presented.

²⁶ Moorcroft & Bennett, 1995, p.12

opportunities in rural areas. It was in this framework that the first research projects with a focus on telework were launched. Among these were:

- PATRA (on social and psychological aspects),
- MITRE (to explore the “business case” for teleworking), and
- SYNERGY (ECTF) the consensus and awareness raising project
- under the umbrella of the ORA RTD Programme, with a planned synergy with the LEADER initiative in support of local and rural employment.

What follows is a brief overview of these projects.

PATRA (Psychological Aspects of Teleworking in Rural Areas).

This R&D project, undertaken within the EU's ORA (Opportunities for Rural Areas) programme, established the social and psychological issues confronting users operating within the new teleworking developments. A range of techniques, including questionnaires, interviews, attitude scales, and intensive panel studies, was employed to consider how all kinds of users - from managers to those who are managed - respond to the new ways of working demanded by the new technologies.

Detailed analysis of the results from people across Europe showed that user needs change as the organisation inevitably changes. The 'flattening' of the organisation's communication and influence structures that occur mean that work changes, often in unpredicted ways.

MITRE (Market implementation of teleworking in rural environments)

The objective of this project was to show how telecommunications can enable geographically remote workers to be fully integrated into economic activities. This may be achieved through the development of the market for Information Processing services provided by TeleService Centres, (TSCs), also known as telecottages or telehouses. For these to flourish, their economic viability must be proven. These to date have (understandably) been teleworker oriented. MITRE also explored a complimentary focus which are the commercial requirements of large companies, who have the most to gain from the decentralisation of their information handling activities.

SYNERGY (Synergetic network for development of the European telework/telematics forum)

This project was to develop and expand the European Telework/Telematics Forum (ECTF) as the framework for EC Concerted Actions on Telework, Telematics in Small Business and Telematics in Tourism. The ECTF is an open and informal association of individuals and organisations active in the promotion and exploitation of new teleworking and telematics in small business and tourism particularly those opportunities which contribute to revitalisation of rural areas. The ECTF's objectives are: to encourage the exchange of information between telematics initiatives in Europe, EFTA, and Central Europe, to liaison with initiatives in the USA and elsewhere, to assist in concertation actions - publications and seminars, and in the development of consensus, as appropriate, for technology development.

ORA RTD (Opportunities for Rural Areas - Research, Technology, Development)

with a planned synergy with the LEADER initiative in support of local and rural employment.

LEADER- acronym for the French title "**Liaison Entre Actions pour le Developpement de L'Economie Rurale**" (links between actions for the development of the rural economy).

On the 15th of March 1991, the Commission of the European Communities decided to establish an initiative which would serve as a model for rural development, hereinafter referred to as LEADER. Under the LEADER programme assistance in the form of integrated global grants would be provided to permit local groups to implement measures to support local development. The groups were to have a substantial degree of flexibility in implementing at local level the initiatives financed by the national global grants. The essential approach under LEADER therefore is what has come to be known as 'bottom-up'. The objective of the initiative was to find innovative solutions which would serve as a model for all rural areas and ensure maximum integration between sectoral measures. The Initiative provided funding for Technical support, Vocational training, Rural tourism, Small enterprises, crafts, services, Exploitation of natural resources, Administration and "Other" measures.

In 1993 the priorities were set for Europe's transition to becoming an Information Society with the White Paper on *Growth, Competitiveness, Employment, the Challenges and Way Forward into the 21st Century*. Work was the main priority as at that time Europe was being challenged by the growth of unemployment which could be curtailed or arrested

through a greater flexibility in the labour market. This could be achieved through various agents, one of which was telework.

The Report entitled “*Telework 1996: Actions for stimulation of transborder telework and research cooperation in Europe; Final Report*”,²⁷ created even greater awareness in conjunction with the 1994 Action Plan²⁸ which had identified telework as the first of ten applications to launch the Information Society. This was updated in 1996 under the auspices of the “*Rolling Action Plan*”²⁹, the implementation of the 4th Framework Programme (1995-1998) and the liberalisation of the telecommunications sector.

The Fifth Framework Programme for European Research and Technology Development agreed to by the member states in 1998 brought together all the work related to improving the quality of working lives and helping companies operate more efficiently, as well as in trading goods and services (*New Methods of Work and Electronic Commerce*) for the first time in one Key Action, within the Thematic Information Society Technologies Programme (referred to as: IST).

The Action Lines related to eWork and telework in the 1999 and 2000 workprogrammes for IST, focus upon improving the understanding of changes and new opportunities in ways of working and doing business, together with the development of new technologies,

²⁷ European Union, DGXIII B, April 1996 (OPCE:CD-94-96-695-EN-C)

²⁸ “Europe’s way to the information society: An Action Plan”, COM(94)347, 19 July 1994

²⁹ “Europe at the forefront of the Global Information Society: Rolling Action Plan”, COM(96)607, 26 November 1996. Available at <http://www.ispo.cec.be>

methods and services - for the workplace and for teamwork, within and across the boundaries of organisations³⁰.

Teleworking has been growing within the European Union, as several Fifth Framework research projects demonstrated (See Appendix II, page 92, for details of these and other telework-related research and take-up projects which have been financed by the Commission). In fact, one of these, the SIBIS project, conducted a European-wide survey and estimated teleworking numbers in 2002 at around 10 million – a 29% per annum increase from 1999. Trends also indicated that the prevalence of telework would continue to increase in future.³¹

This trend has been welcomed, and supported, by the Commission and many Member States. Many employers and unions have also changed from the hostility to telework which was common in the 1980s to a more positive, if still sometimes sceptical, approach. This was reflected in the creation of the European Framework Agreement on Teleworking in 2002³². The central EU-level social partners who signed the framework agreement on the regulation of telework, were:

- **European Trade Union Confederation (ETUC);**
- **Council of European Professional and Managerial Staff (EUROCADRES)**

³⁰ E-work 2000 pp11-12: <http://www.eto.org.uk/twork/tw00/pdf/tw2000.pdf>

³¹ SUSTEL IST–2001-33228 Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking:
http://www.sustel.org/documents/march%2004%20deliverables/Policy%20Implications%205_5_2004.rtf
pp 5

³² SUSTEL, IST–2001-33228, Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking:
http://www.sustel.org/documents/march%2004%20deliverables/Policy%20Implications%205_5_2004.rtf
pp 6

- European Confederation of Executives and Managerial Staff (CEC) liaison committee;
- Union of Industrial and Employers' Confederations of Europe (UNICE)
- European Association of Craft, Small and Medium-Sized Enterprises (UEAPME); and European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest (CEEP).

This agreement seeks to regulate areas such as employment conditions for teleworkers, health and safety, training and collective rights. It also provided a definition of telework³³.

The conclusion of this accord represented the culmination of consultation and debate on this topic over the past two years. According to Anna Diamantopoulou, who was the Commissioner for employment and social affairs at the time: *'This is a landmark deal. Not only will this initiative benefit both workers and businesses, but it is the first European agreement to be implemented by the social partners themselves. This shows the coming of age of European social dialogue.'*³⁴ The agreement is included as Appendix I, page 86.

The agreement is to be applied within three years of its signature – i.e. by 16 July 2005. The member organisations of these signatory parties will report on the implementation of the agreement to an ad hoc group set up by the signatories. This group will then prepare a joint report on implementation within four years after the signature of the agreement. Any questions on the content of the agreement can be referred to the signatory parties by their

³³ Discussed in Chapter 1 pages

³⁴ <http://www.eiro.eurofound.eu.int/2002/07/feature/eu0207204f.html>

member organisations, either jointly or separately. The signatory parties will review the agreement after five years if requested by one of the signatory parties.³⁵

Lisbon Strategy 2000

The ten year strategic plan set out in the European Council in Lisbon 2000 was geared towards making the EU, the world's most dynamic and competitive economy. The European Employment Strategy³⁶ which was set up with the aim of combating unemployment in 1997, with reviews scheduled for 2000 (mid-term) and 2002 (five year review) then decided to rephrase and integrate its directions and objectives to be aligned closer to the Lisbon goals³⁷ of sustained economic growth, more and better jobs and greater social cohesion by 2010.

The EU-level social partners in the local and regional government sector established a European sectoral social dialogue committee in January 2004³⁸. The new committee drew up a work programme and adopted a joint statement *on telework*. The main contents were as follows:

“The parties note that local government throughout Europe is facing many challenges as it strives to provide modern, efficient and effective services to the communities it serves. The parties believe that, in order to meet these challenges,

³⁵<http://www.eiro.eurofound.eu.int/2002/07/feature/eu0207204f.html>

³⁶ Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, The future of the European Employment Strategy "A strategy for full employment and better jobs for all" of 14.01.2003 (COM(2003)6 final). And also Council Decision on guidelines for the employment policy of the Member States of 22 July 2003 and (2003/578/EC)

³⁷ SUSTEL, IST-2001-33228, Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking:

http://www.sustel.org/documents/march%2004%20deliverables/Policy%20Implications%205_5_2004.rtf
pp 13

³⁸ <http://www.eiro.eurofound.ie/2004/03/feature/eu0403203f.html>

local authorities must take advantage of all opportunities available, including technological and organisational innovation, such as teleworking. For employers, teleworking can provide financial savings, productivity gains, flexibility in service delivery and an additional tool for managing labour market issues. For employees, teleworking can provide more flexibility in the way work is carried out, overcome barriers to mobility, reduce commuting time and expense and help individuals to reconcile their professional and family life. Nevertheless, the social partners add that many jobs require personal attendance at a particular workplace and that telework requires particular skills from workers and managers.

The local and regional government joint statement makes reference to the intersectoral EU-level agreement on telework, concluded by the central EU-level social partners in July 2002 (EU0207204F), which aims to establish a general framework on this issue at European level. This accord is to be implemented voluntarily by the members of the signatory parties in accordance with national procedures and practices. The local and regional government social partners offer specific guidance for their own sector. They state that telework is now a feature of the EU local and regional government sector and its incidence is likely to grow in the future. The social partners in some Member States have already implemented agreements or guidance on telework. The parties to the joint statement welcome the EU-level intersectoral accord, stating that it 'provides a framework by which the rights and duties of employers and employees can be established and articulated. This framework can help facilitate the efficient and fair management of telework'. They state that they will encourage their members to use it when discussing the introduction or management of telework, devising policies or concluding agreement on telework in the local and regional government sector. CEMR-EP and EPSU make a commitment to monitoring developments and undertaking a first assessment in 2005³⁹.

³⁹ Ibid.

When reviewed again in 2004 the strategic goal of Lisbon was once again reconfirmed through the Kok Report as well as through SUSTEL⁴⁰ and other European research projects, which suggested that well-managed teleworking – and especially its mobile variants (e.g. virtual call centres), - could play an important role in achieving these objectives. SUSTEL is a research project on teleworking financed by the European Commission's IST initiative. It aimed to:

- enhance understanding of the economic, environmental and social impacts of teleworking
- identify ways in which these can be influenced by organizations and Governments
- develop tools and guidance materials to enable organizations to evaluate and optimize the sustainability of teleworking initiatives.

The competitiveness of European enterprises could improve if better productivity and efficiency is achieved. Teleworking can contribute to better work performance, the reduction of space needs, the reduction of congestion, and reduced absenteeism and recruitment costs, whilst also - on balance - benefiting most employees, society as a whole and the environment to at least some (and probably a substantial) degree. Teleworking can also help to increase employment rates for older or physically challenged workers as if they are unable to work because of immobility, then the work can virtually come to them through the diverse technological mediums, inside the home.

⁴⁰ SUSTEL, IST-2001-33228, Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking:
http://www.sustel.org/documents/march%2004%20deliverables/Policy%20Implications%205_5_2004.rtf
pp 13

Economic, Environmental and Social Impacts

Any development which takes place must be sustainable and “*it is widely believed that teleworking can make a substantial contribution to sustainable development*”⁴¹

SUSTEL is a project which is focused on overcoming barriers to achieving sustainable growth with telework as a contributor. It will also identify and aid in overcoming barriers which allow governments and organisations to fully understand the long-term sustainability of telework. It hopes to do this by developing a holistic framework of resources, filling in some of the research gaps, and examining sustainability relevant changes in established teleworking schemes over time.

SUSTEL (Sustainable Teleworking) is a two year research project financed by the European Commission's IST initiative. The project is a collaboration between:

Italy Avanzi,

Denmark Danish Technological Institute,

Germany Empirica,

Netherlands Telewerk Forum ,

UK University of Bradford, BT and UK Ceed .

To date it is probably the most detailed comparative research on the economic, environmental and social impacts of telework yet undertaken.⁴² For this reason it will be used as a basis for this report and also for the fact that it has also developed tools and guidance materials to enable organizations to evaluate and optimize the sustainability of

⁴¹ SUSTEL, IST-2001-33228, Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking: http://www.sustel.org/documents/deliverable_3-conceptual_paper_v2.doc pg 5

⁴² IST-2001-33228. Is Telework Sustainable? www.sustel.org

teleworking initiatives. The material and research is also suitable for entities wishing to assess the viability of embarking on telework oriented projects or future teleworkers. It is also useful for integrating with existing knowledge to undertake organisational decision-making. It is also has several limitations which will be taken into consideration for our local research and its results. The most salient are:

1. Only covers organizational teleworking
2. Did not address the important topics of self-employed telework or telework enabled migration between organizations and countries
3. Cases and surveys are not representative of telework in all European organizations.

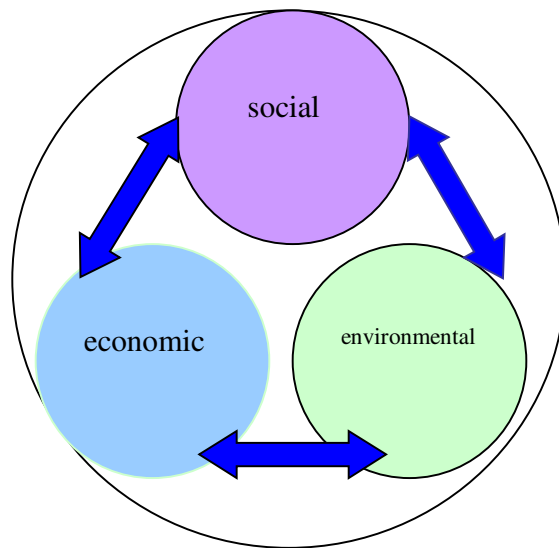
In conclusion this report suggests that we should use European benchmarks as the primary data, as in the future we will have to collect data and statistics so as to contribute to the overall regional data collection. It is also easier and less erroneous to compare like with like.

The SUSTEL project began with the identification of 15 aspects of the relationship between telework and sustainable development. Sustainability was defined along three dimensions:

Economic dimension: cost-effectiveness

Social dimension: socially acceptable to workers, families and society

Environmental dimension: environmentally sustainable.



Schematically the 15 aspects of the relationship which involved assessing the economic, environmental and social impacts are shown in the model below:

ECONOMIC IMPACTS	ENVIRONMENTAL IMPACTS	PERSONAL AND SOCIAL IMPACTS
Added value	Transport	Social Inclusion
Human Capital	Air Quality	Quality of Life
Employment	Resource consumption	Work Life Balance
Personal Wealth	Built Environment	Health
Resilience	Safety	Community

Five partner countries covered 30 case studies. Surveys of teleworkers were spread over six organisations. This was done in order to obtain a variety of national and organisational perspectives.

The social aspects of telework were first addressed by the Green Paper on *Living and Working in the Information Society: People First*, adopted in mid-1996. The ensuing consultation process showed a somewhat polarised debate, some believing telework should evolve naturally; others arguing that new legislation is needed to protect teleworkers. The follow up to this Green Paper, *The Labour Market and Social Dimension of the Information Society*⁴³, also addressed telework and announced, inter alia, the launching of a consultation with the social partners on whether and to what extent Community action on the protection of teleworkers is advisable⁴⁴.

Another Green Paper, *A Partnership for a New Organisation of Work*⁴⁵, adopted in mid-April 1997, resulted in the Communication *Modernising the organisation of work – a positive approach towards change*⁴⁶ which then dominated the agenda on social policy.

⁴³ COM(97) 390, 24 July 1997: http://europa.eu.int/comm/employment_social/soc-dial/info_soc/com397/97397en.pdf

⁴⁴E-work 2000 pp11-12: <http://www.eto.org.uk/twork/tw00/pdf/tw2000.pdf>

⁴⁵ COM (97) 128 final, 16.04.1997, April 1997/ http://europa.eu.int/comm/employment_social/soc-dial/social/green_en.htm

⁴⁶ COM(98)592, November 1998 http://europa.eu.int/comm/employment_social/soc-dial/labour/com98-592/com592en.pdf

SUSTEL Summarised Conclusions

Addressing the Economic Impacts

Telework is economically beneficial in most, but not all cases. From 30 case studies in five different partner countries, only 12 were felt to have a complete understanding of telework's costs and benefits.

Aspects	Assessment	Comments
Added Value	Positive	General improved work performance, less absenteeism, improved recruitment and retention. Most cases offset additional costs such as home equipment. Mobile teleworking can cut office costs considerably. Poorly designed telework schemes can be financially negative
Human Capital	Mixed	Most felt teleworking had a positive influence on their competencies and skills. Large minority felt negative impact on their careers
Employment	Insufficient evidence	Some examples of teleworking changing geographic location of work
Personal Wealth	Positive on Balance	Financial benefits such as reduced travel and childcare usually outweighed costs such as home heating
Resilience	Positive on Balance	Allowed workers to overcome travel and other disruptions, but increased vulnerability to systems failure

Addressing the Environmental Impacts

According to James (2004)⁴⁷ the SUSTEL report is not a complete analysis of the environmental impacts of telework as this would require detailed life-cycle assessment and the aggregation of different kinds of impact. However the report does suggest that telework has ‘a small effect on balance - and, at the very least, environmental impacts are not sufficiently negative to block any economic or social benefits from being achieved’.

Aspects	Assessment	Comments
Transport	Positive on Balance	Avoidance of congested periods and less travel
Air Quality	Positive	Reduced transport, less emissions. Indoor workers may be at risk through higher indoor exposures(e.g. high radon areas)
Resource Consumption	Positive Negative	If buildings are energy and material intensive to operate and run Duplication of resources
Built Environment	Too soon to tell	Mobile teleworking results in redesign of work spaces and sometimes relocation. Can have negative impacts if flexible offices are not well located for public transport.
Safety	No discernable effect	

⁴⁷ James, P. 2004, IST-2001-33228. *Is Telework Sustainable?* Pg 4.

Addressing Social aspects

SUSTEL⁴⁸ survey respondents felt that on balance teleworking was beneficial and the positive social impacts outweighed the negative ones.

Aspects	Assessment	Comments
Social Inclusion	Positive on Balance	Some evidence of discrimination against people having insufficient working space at home, but several cases reported creation of new or maintenance of existing employment opportunities for people who otherwise may be excluded.
Quality of Life	Positive	Almost all reported improvements. UK reported increased working hours
Work Life Balance	Positive	Majority reported it had been improved
Health	Positive	Beneficial effects and less sick leave reported
Community	Positive	Led to increased use of local services and for a significant minority, greater involvement in community activities

Building on results obtained from the surveys, a Sustainability assessment tool⁴⁹ was developed over the period from January to June 2003. SUSTEL developed on-line resources to help organisations to identify and evaluate the key economic, environmental and social dimensions of teleworking.

This was then followed by the development of Business guides⁵⁰ (July-December 2003) which give advice on how to maximise sustainability benefits in organisational teleworking schemes, with examples of best practice. The SUSTEL project was to be

⁴⁸ James, P. 2004, IST-2001-33228. *Is Telework Sustainable?* Pg 4, pp 25-34

⁴⁹ <http://www.telework-test.org/>

⁵⁰ http://www.sustel.org/documents/D16_brochure.pdf

concluded with the formulation of a Policy ⁵¹(July-December 2003) which would outline the implications of the project research for European, national and local Government.

The policy Implications were published in March 2004⁵², in a document entitled *Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking*. This document concluded that despite considerable research, many of the impacts of telework remain uncertain. The project identified some potentially negative effects of teleworking, and whilst many of these can be minimised by well designed and managed schemes, they are also balanced by many more potentially positive aspects.

SUSTEL is probably the most detailed comparative and integrated research on the economic, environmental and social impacts of telework yet undertaken, however the project only covered organisational teleworking schemes and, despite its size, could not be fully representative of Europe's 10 million plus teleworkers. Nonetheless, this does give its conclusions considerable significance.

The report also demonstrated that sustainable telework has considerable relevance to, and can help to achieve the goals of, the **Lisbon Strategy** and supporting policies such as the **European Employment Strategy** and **eEurope 2005**, although it was not living up to its full potential because of various barriers. The report made a number of recommendations to overcome these barriers and ensure that telework is sustainable, and is more widely taken up and implemented. Key targets for these recommendations were identified, and

⁵¹ <http://www.sustel.org/about.htm>

⁵² http://www.sustel.org/documents/march%202004%20deliverables/Policy%20Implications%205_5_2004.rtf

of specific interest to Malta, are the areas where telework is currently less developed or where there is considerable potential. The areas identified are the public sector everywhere, and many other sectors in Eastern and Southern Europe.

Viability for Organisations

Nilles had observed that *“In any organization that is based on economic survival for its continued existence – from families to multinational corporations and even to governments – it is absolutely essential that economic benefits of its efforts match or exceed the costs”*⁵³. Telework is no exception and organizations will not introduce it, or continue to use (if they are already using it), unless the benefits outweigh the costs. Another challenge or worry that management always considers is how will it know that the workers are actually working when they say they are.

Modern day management has many performance measurement and appraisal tools at its fingertips, such as the Balanced Scorecard, VBM (Value Based Management) EFQM (European Foundation for Quality Management Model), and MBO(Management by Objectives). They have enabled the manager to be more affective and more efficient as workers become more empowered through delegation and knowledge sharing. The Learning Organisation, ⁵⁴, with the emphasis on knowledge sharing, the seminal work of Hamel and Prahalad (1994) where strategy is conceived as a collective learning process aimed at developing and exploiting ‘core competencies’: these and other ‘modern’ principles certainly take IT and exploit it to the limits so as to achieve success, not just in

⁵³ Nilles, 1998, p 135

⁵⁴ Senge P, 1990, The Fifth Discipline

monetary terms, but in a holistic fashion, including aspects such as quality of life and the environment.

Measuring Performance

Many businesses that have embraced mobile and teleworking say they are reaping benefits, and what they have learned is that remote working needs a change in management style, with an emphasis on good communication and rigorous measurement of performance.⁵⁵ Communications company Avaya has about 60 per cent of staff working remotely during a typical month. Mike Young, HR director for Avaya, UK, Ireland and the Nordics, interviewed for Personnel Today (Adshead:2004) commented:

"It needs a different style of management, one based on outcomes and objectives. Instead of being used to seeing people all the time, you have to measure performance against clear outcomes. Managers have to ensure the same feedback is given to staff working remotely as they would get in the office and there is joint accountability for achieving goals. At the end of the day, staff are going to have an appraisal so working at home is not a soft option."

Another challenge that will have to be faced by Management is building trust and rapport, especially difficult when it has to be applied over a distance. Nilles says⁵⁶:

'The Core virtue of quality telemanagement is trust. If you trust your employees to do their jobs, whether or not you are physically in the neighbourhood, and they trust you to provide competent direction and guidance, reward them for work well done – and penalize them for work poorly performed, much of your job is under control. If you don't achieve that level of trust with everyone, then teleworking is not recommended for those for whom the trust factor isn't there.'

⁵⁵ Adshead, Antony, 14.09.2004, A different mindset, Personnel Today, 09595848,

⁵⁶ Nilles, 1998, pp. 99

In fact Nilles suggests that the two halves of telemanagement are Trustworthiness and Rapport. It will be easier if the workers chosen are those that are well-established, and surveys of successful telecommuters show that they would have been with the organisation far longer than the average worker.

However if the concepts of trust and rapport are backed up by management systems that will be used to regulate and control the relationships and to keep open communication links between management and workers, then there is no reason why teleworking should not be successful in spite of these challenges.

National and Strategic Policy Type Messages about ET

In 1994 the government of Malta commissioned a one year project through the Malta Council for Science and Technology, the aim of which was to draw up recommendations to deploy information technology on three principal fronts:

- business opportunities and development;
- telecommunications infrastructure; and
- education.

This research project formed the basis for Malta's National Strategy for Information Technology. It identified IT as the necessary ingredient that Malta needed in its search for a new cycle of socio-economic growth and recommended ten strategic thrusts.

In fact Malta's economic policy, which took into consideration the proposals of the research project, was conducive to the substantial investment made in the sector of telecommunications, as this was seen as an enhancer of Malta's strategic position as a e-

commerce hub. Various initiatives from the private as well as public sector also contributed to this vision and today Malta can boast of having high quality communication links, an English speaking⁵⁷ workforce, which is also IT literate to varying degrees.

These factors combined with a good business infrastructure, a unique geographical position which can straddle two continents, a comparatively⁵⁸ low-cost wage structure as well as the recent e-commerce legislation and support which has been provided for by government, place Malta in an ideal position to market its services as a telework hub.

In fact in May 2000, a White Paper on the Legislative Framework for Information Practices was presented. This White paper had followed close on the heels of a European Commission's White Paper on Commerce⁵⁹: a new strategy for retail; which sought to identify the different fields of action in order to contribute to increasing the competitiveness of the sector and enhance opportunities for creating new jobs. One of the main action plans advocated by the European Commission's White Paper on Commerce, was to assist small and medium sized enterprises (SMEs) in the distributive trades to take full advantage of electronic commerce.

The government of Malta's White Paper Legislative Framework for Information Practices (2000) proposed three new bills, namely an Electronic Commerce Bill which would establish the legal basis for the safe but free conduct of electronic commerce; a Data Protection Bill to safeguard citizens from potential abuse of their personal data through information systems; and a Computer Misuse Bill which was aimed at protecting the rights of the owners of valuable data and information systems:

1. The bill on e-commerce proposed to lay down the legal foundation for the safe conduct of communication, contracts and electronic transactions carried out through e-commerce. It also provided for the protection of both service provider as well as consumer. The Bill was been drafted in such a way as to be sufficiently

⁵⁷ Small sector of workforce is also multi-lingual

⁵⁸ Compared to European standards

⁵⁹ EU Business, 1999, <http://www.eubusiness.com/imported/1999/01/10291/> last accessed 15 Feb 2005

- flexible to embrace new technological developments⁶⁰. This Bill is extremely important given that e-commerce should be playing a significant part in the development of Malta's economic activity
2. The Data protection bill was intended to protect the confidentiality of data and guard against abuse, as it provides for the setting up of an authority to ensure that personal information was used for the purposes permitted by law, that such information was obtained correctly and that it was properly updated. Provisions in the law would stipulate that in certain circumstances data must be destroyed.
 3. The Computer Misuse Bill proposed to introduce a number of criminal offences that deal with the unauthorized use of and access to computers including storage media and supporting documentation.

These bills drew on a variety of sources, including the United Nations Commission on International Trade Law (UNCITRAL) Model Law on E-Commerce of 1996, the 'Electronic Signatures' and 'Electronic Commerce' directives of the European Union, as well as from the legislation of other jurisdictions, primarily Australia and Ireland⁶¹. The Electronic Commerce Bill was enacted in January, 2001 as the Electronic Commerce Act (Act III of 2001). It was amended by Acts XXVII of 2002 and IV of 2004 of The Electronic Commerce Act.

This legal framework has inspired more confidence in e-work and e-commerce as witnessed through the development of a culture of information technology, spurred on by key elements such as e-government, government commitment to broadband accessibility to all as these initiatives not only ensure Malta's position as a leading hub for electronic

⁶⁰ The Electronic Commerce Bill was enacted in January, 2001 – the Electronic Commerce Act (Act III of 2001).

⁶¹ Helping Small Firms Trade Effectively with the Internet, Case study: Malta's Trade Promotion Strategy, *International Trade Forum - Issue 3/2000*, Page 16
http://www.tradeforum.org/news/fullstory.php/aid/104/Helping_Small_Firms_Trade_Effectively_with_the_Internet.html

commerce, but would also give Malta a competitive edge in a fast-evolving international labour market -place.

Telework in Malta

The Employment Barometer which is organised by the ETC every six months is a useful source of information on the Maltese labour market. Between the period of Winter 2004 and Spring 2005, two questions for employers were included in the survey. These were based on the concept of telework which implies that a person works for a set minimum number of hours per day or week away from the place of employment, whether this be at home or elsewhere, through the use of information technology

Research Questions

1. Do you use any form of telework?	Yes	No
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If yes: What occupation and nature of work?

If no: Why not? I don't know enough about it
 Not applicable to the nature of work

2. Would you like to know more information about it?	Yes	No
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If yes, in which way:

- Through newspaper articles
- Direct contact with you through e-mail
- Direct contact with you through a publication
- Through seminars for employers

Results

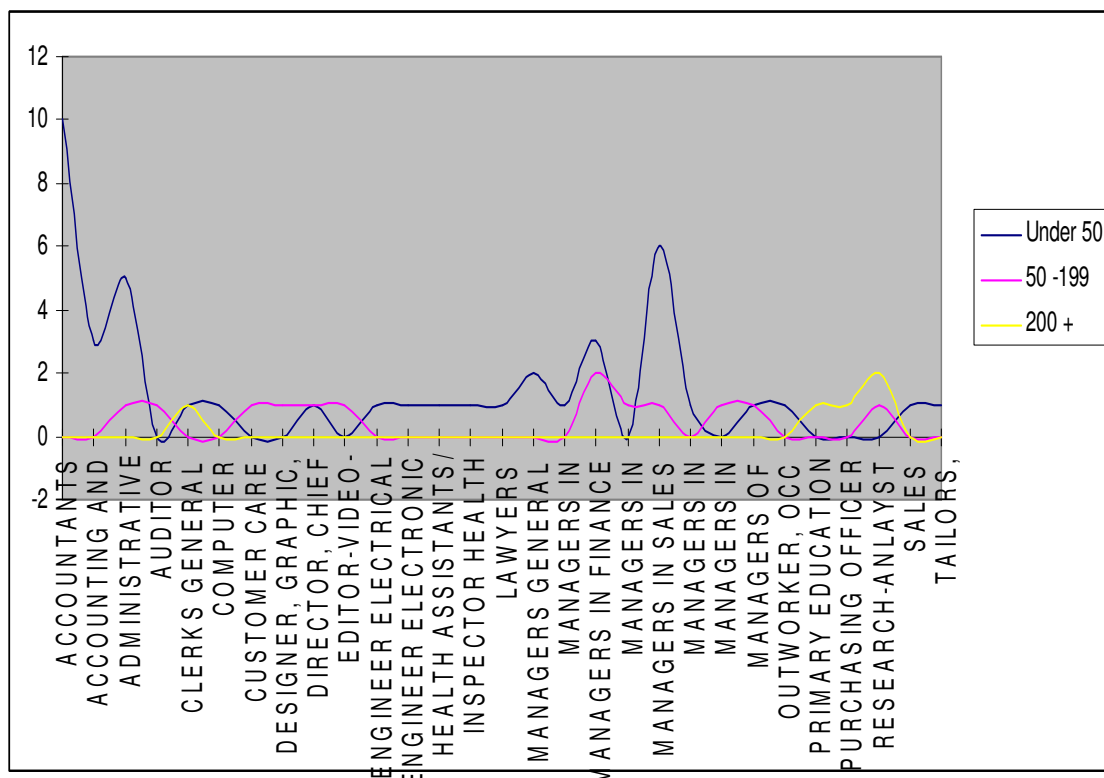
Out of a total of 1,118 employers only 43 answered in the affirmative, which means only 3.8% use a form of telework.

3.5% of companies that employ less than 50 workers use some form of telework

4.2% of companies that employ between 50 and 199 workers use some form of telework

7.4% of companies that employ over 200 workers use some form of telework

Employers that do use some form of telework are subdivided as indicated in the following chart:



The National Office of statistics⁶² also conducted a survey during 2003, which was published on 2005, entitled *ICT Usage in Enterprises*. It investigated all large firms (employing an equivalent of more than 50 full time employees) and a representative

⁶² http://www.nso.gov.mt/statdoc/document_file.aspx?id=990

sample of firms classified as small or medium (employing an equivalent of more than 9 but less than 50 full time employees).

The population sample of 615 of the NSO survey had a response rate of 68.5, resulting in 421 enterprises which took part in the survey. Of these 11.4 employed persons confirmed that they regularly use telework. This is nearly 3 times the amount which resulted from the Eurobarometer survey. The NSO report does not give an indication of the definition used for teleworking.

From the Eurobarometer, we can note that the sectors of Finance, Business, administration, Sales, purchasing and marketing are adopting the use of telework. Whilst the NSO survey reveals that the sectors which use telework most are the real Estate, renting and Business activities- computer and related activities (87%) as well as the Energy sector- water and Energy activities (66.7%).

These two surveys are not conclusive and more in depth and detailed research will need to be undertaken at a National Level, which ideally should include quantitative as well as qualitative data.

Conclusion

The revolution in information technology has come about and in Malta, most of its application seems to be in e-commerce. Clearly this may not be the most important application for our development. Applications could be used in how we design our organizations and how we can make them function.

The majority of Maltese businesses are run in a traditional way, mainly because they are family run businesses - traditionally described as 'paternalistic'⁶³. According to Mifsud (2003)⁶⁴, *'Maltese senior managers tend to be status seekers: distancing themselves in a hierarchy to establish a status identity'*.

Traditionally organization hierarchy layers were there not only for supervision or decision making, but served as nodes for communication. They would either subdue, amplify, interpret and subvert information as they thought necessary or as instructed by higher officials in the hierarchy. This part of their function can be taken over in whole or in substantial part by technology should management wish to do so. This would result in a modern organization structure that is flatter and will continue to become flatter as cross functional management becomes the order of the day.

In effect this means that workers can decide how willing they are to take charge and responsibility for their appointed tasks. If empowered to take more and more decisions, most people will do so and this would also include setting higher standards for their task performance (especially if remuneration is performance linked). They would also take responsibility for their own communications and relationships, (personal and work-based) within their own personally set time-frame. So in effect we will see that in many cases, communication (information) would take over from control (managing by keeping people under a watchful eye); and therefore being connected will replace being in control.

⁶³ Baldacchino G. et al, 2003, Managing people in Malta, pg.38

⁶⁴ Mifsud in Baldacchino G. et al, 2003, Managing people in Malta.,

Chapter 3

This chapter will look at 3 case studies consisting of 3 local companies and 3 employees. It will also formulate a SWOT analysis based on the findings of the case studies as well as on the literature review.

Case Studies Research Methodology

This research project seeks to establish a baseline guide for the situation as regards the use of telework in the Islands of Malta. Companies were approached to take part in the study, however many preferred to decline. The main reason is that within large companies, there are no defined work criteria for using telework. Few organisations think that telework is a type of work, not a way of doing work. Others associate telework with only one aspect, for example telework equals call centres, and does not consider its executives that work from home, outside normal office hours, using a laptop, modem or cell phone as telework. It became apparent that there is also a growing thirst for knowledge about telework and how it could help companies achieve competitiveness.

Part A of this section will examine three organisations that were chosen as case studies. They are some of the few organisations or companies that do use some form of telework and which consented to being interviewed.

The second part of this section, Part B will examine the response of 3 employees who work for the above organisations and who telework. Interviews were carried out with these three employees and cumulative results together with an analysis will follow. For reasons of confidentiality, pseudonyms for the individuals will be used.

PART A: The Organisations – 3 Case Studies

CASE 1- Malta Communications Authority

The Teleworking Initiative and Its Context

Background Information on the Case Study Company

The Organisation and its Environment

The Malta Communications Authority is the National Agency responsible for the regulation of the telecommunications sector. It was established on 1 January 2001.

The Malta Communications Authority (MCA) has general powers under the Malta Communications Authority Act (Chapter 418 of the Laws of Malta), and specific powers under other laws, such as the Telecommunications (Regulation) Act (Chapter 399 of the Laws of Malta). The Postal Services Act identifies the Authority as the competent authority to regulate postal services; and the Electronic Commerce Act establishes the Authority as the e-commerce regulator. It regulates the field of communications in the manner prescribed by law.

The Authority is responsible to ensure freedom of communications, which shall not be limited except when there are higher values at stake, such as the protection of the right to privacy, or the prevention of crime. It also has a duty to ensure non-discrimination and equality of treatment in matters related to communications.

The primary role of the Authority is to facilitate freedom of choice and value for money for consumers. In addition, the Authority has a strategic role to promote sectoral investment through the creation of an environment that is conducive to business and one ensuring sustainability of competition.

The Authority also grants licences, resolves disputes relating to communications, and in general ensures the well-being of the communications markets, including the telecommunications markets. It has obligations to the consumer in relation to prices, standards and availability of services. The Authority is also responsible for service standards, and perform all the functions assigned to it by the Ministry for Competitiveness and Communications.’⁶⁵

Management and Human Resources

Currently there are 43 members of staff. The administration support team work regular office hours and have to be in the office premises at all times. Senior management forms the main part of the operation, the majority of which are professional graduates. A fair amount of the senior levels are post-graduates. The management hierarchy is quite flat,

⁶⁵ Malta Communication Authority Home page. <http://www.mtc.gov.mt/communications.asp>

with a matrix system, that is people come together to work in teams on different projects. Therefore this means that work performance is goal based.

Current Teleworking Activities and their Development

Current Teleworking Activities and Teleworking Drivers and Policies

A formalised telework policy has not been implemented; however an ad hoc type of telework is being used by the senior workers at MCA. This has come about due to two factors (or drivers).

The first factor is that senior management, due to work exigencies, may be away from the island or may need to work from an office building in Valletta or may also need to work from home. This means that staff members needed hardware, software and connectivity to enable them to work from outside the main office.

Another driving factor which led workers to use telework had been that the old office in Valletta had become too cramped for the number of employees that had to be taken on due to an influx of work. So the idea of hot-desking had been introduced on a trial basis because of the office space limitations. This meant that senior staff could utilise any desk in their offices as they are all supplied with laptops instead of cumbersome PCs which they could plug into the intranet and internet system. The hot-desking system was not liked, as most people prefer to have their own desk, their own space in the office.

In the present offices now, everyone has their own desk, and all the computers (PC and laptops) have access to the intranet, which besides allowing staff access to files, is linked to other shared peripherals such as printers, etc. Faxes may also be sent and received digitally, thus eliminating use of paper and other consumables. The organisation itself uses hardware and software that is of a high standard, all the staff are well trained in the use of this technology and this means that it is in fact geared for telework on an IT and skills level, should it wish to introduce it formally.

At present telework is mainly used when:

- Staff are working abroad
- Staff need to go into work at the Valletta office
- Staff work at home
- Outside normal office hours
- When they are too ill to go into the office but well enough to work on their laptop
- Family crisis such as when other family members are ill and need to be cared for at home.
- Need time off during normal office hours and then it can be made up for by working at home, usually at the weekend
- To help out the company if there is an emergency that crops up during non-standard time working hours.

At a ministerial level, there seems to be a commitment to sustain the ongoing IT support as seen from a recent comment by the minister responsible for the MCA when he stated that ICT “should serve as crucial tools for achieving economic progress”⁶⁶ .

Teleworking and Information and Communication Technologies

All professional senior staff members have access to a laptop which also forms part of the company’s intranet. Connectivity is through broadband and also using mobile telephony. Audio/video conferencing could be availed of, but it is rarely used.

CASE 2 – S A G A HOLIDAYS (MALTA OPERATION)

The Teleworking Initiative and Its Context

Background Information on the Case Study Company

The Organisation and its Environment

SAGA Holidays (UK) is an International Tour Operator, based in Folkestone, England. It specialises in holidays for the over 50's to over 30 different countries. Malta is one of the destination countries and British and American tourists are offered the chance of coming to Malta and staying here at a number of different hotels or resorts. They may also use Malta as a starting or ending point for Mediterranean cruises.

⁶⁶ Press Release by Ministry for Competitiveness and Communications, 1/2/2000, ICT’s crucial for achieving economic progress - Competitiveness and Communications Minister Censu Galea. DOI ...

Management and Human Resources

The Malta operation consists of a core group of full time employees (approximately 5 as this would depend on the number of tourists that the destination will be handling). This team co-ordinates all arrivals, departures, hotel accommodation, excursions, activities, transfers, etc.in liason with local handling and service support organisations. The team is managed by the Regional manager, who not only looks after the Malta operation, where she is based, but may also need to travel to other Southern Europe and Mediterranean resorts to troubleshoot and oversee quality assurance.

The operation is manned around the clock, with live- in staff at the main hotel, who are expected to be on call for all sorts of emergencies.

Current Teleworking Activities and their Development

Current Teleworking Activities

All members of the Malta operation are IT skills enabled as their job requires utmost efficiency in pursuance of high quality assurance. They deal with people all the time, whether these may be clients, suppliers or other intermediaries. Nearly all problems have to be handled efficiently and effectively, at the moment that these occur and mobile phones, laptops with interconnectivity are extremely important to achieve these goals.

Also working using technology saves time as well as money, even for completing mundane tasks. A small example of this would have been that in the past, passenger manifests would have been sent by snail mail (very slow) or by courier (very expensive). Telex was sometimes used also with its innumerable drawbacks. Nowadays a manifest is

sent by email, with each amendment taking just a few seconds to make and received in real time at the destination country. In the past if an amendment was needed, it was first done telephonically and then sent as a printed document either by mail or with other slow means.

Teleworking Drivers and Policies

Teleworking in these types of organisations were introduced organically, more or less, as people adopt new ways of performing tasks which are more efficient and effective. This also means that there was no particular policy, but the drivers themselves were linked to the need to be innovative and creative to perform tasks in the best way possible and with the least delay.

Teleworking and Information and Communication Technologies

All the staff members have access to mobile phones and some have PCs or laptops or notebooks. PDAs have been used in the past but were not found to be practical and were withdrawn from use. Most staff members have interconnectivity via dial-up, however at the moment there is a change over to ADSL. Staff members tend to use mobile for most communications as it is instant and response is immediate. Using email is not practical for their everyday work as it means that one has to be tied up to a fixed area where internet connections are available. This situation should change in the near future as more Wi-Fi (Wireless High Speed Internet Access) areas become accessible especially in hotels and airports, which is where the bulk of the front-line work takes place.

CASE 3 – Malta Council for Science and Technology

The Teleworking Initiative and Its Context

Background Information on the Case Study Company

The Organisation and its Environment

The Malta Council for Science and Technology is the national advisory body to Government on science and technology policy. The MCST is responsible for identifying and addressing major science and technology challenges and issues of strategic importance for Malta, thereby contributing to the development of coherent and sustainable policy visions and initiatives.

The MCST's main remit is to encourage investments and capacity building in science and research, with a view to promoting a culture for science, technology and innovation across the public, private and education sectors.

The MCST is also the national agency responsible for the management and co-ordination of Malta's participation in the Sixth Framework Programme for Research, Technological Development and Innovation (FP6).⁶⁷

⁶⁷ MCST Homepage, <http://www.mcst.org.mt/>

Management and Human Resources

Currently there are 15 members of staff. The support staff work regular office hours and have to be in the office premises at all times. Senior management forms the main part of the operation, the majority of which are professional graduates. A fair amount of the senior levels are post-graduates. The management hierarchy is quite flat, with a matrix system, that is people come together to work in teams on different projects. Therefore this means that work performance is project based.

Current Teleworking Activities and their Development

Current Teleworking Activities

The management hierarchy is flat and the style is quite informal. This is especially evident amongst the senior and executive levels as they have significant levels of autonomy. Staff are obliged to fill out a timesheet, however this is used as a tool for project management and to a lesser degree as a mechanism to check on workload and attendance.

With reference to the researchers, each one is responsible for organizing his/her working methods and work pace. This is especially relevant as large parts of the work takes place abroad, as well as after 'regular' office hours. The tendency is that mainly the more experienced (senior consultants) who uses this option

Current Teleworking Activities

At MCST there is no formal programme for telework although in practice it is being used. Informal telework exists especially when researchers and other executives are out of the main office and are continuing with their work at the home office or in offices or hotels abroad (mainly in other EU countries)

Teleworking Drivers and Policies

The drivers for telework are the actual need to be able to continue working when one is out of the office in Malta.

Teleworking and Information and Communication Technologies

Most employees (mainly seniors and executives) are not equipped with a laptop computer. Employees working from their home can connect to the intranet using the connection technology of their choice. Currently supports traditional 56 kbps modems (dial back), cable modems and ADSL. Employees most often use their existing connection technology and personal computer systems. However, it is up to the individual employee to inform MCST that they want to secure connection technology to their homes. MCST then supplies the employee with Remote access that does not need a software client to work and only requires a web browser and dedicated website address. Security issues are updated from MCST without affecting the end-user.

When working from home, the employees connect directly to their work pc, and other specific networks which are directly linked to the project the employee is working on.

In terms of accessibility there is no difference between working at home, abroad and working at the central office. All digitally stored material can be accessed – mails, reports, etc. For effective communication systems such as MSM, VoIP, Skype and other special fora are used extensively.

PART B: The Employee Case Studies

The following sections summarise the conclusions which emerged as a result of the interviews. The respondents (2 male and 1 female) with ages ranging from 25 to 44, were employed professionals, either graduates or completing graduate studies. 2 were married with a young family and one respondent was single with no dependants. Aggregate results are reported to respect client confidentiality. The full questionnaire response is available as Appendix III. (Page 94)

These conclusions are indicative rather than representative of all teleworkers in Malta.

Economic Issues

Overall it was economically beneficial to all, although this was not quantified as respondents are not fully aware of the costs and benefits as a result of TW.

Added Value – All the respondents felt that TW improved their work performance in recent years, manifested primarily through higher productivity reflected in a higher hourly output. On the negative side, two out of three reported working longer hours as one of the reasons for an improved performance.

Human Capital – Generally all respondents felt that TW contributed very positively to their career development. A positive influence on competence and skills was expressed by two out of three respondents, whilst the other respondent did not feel TW influenced in any way.

Employment – the option to telework was not relevant to staying or joining the current employer for two of the respondents, and the option to telework is factor for one respondent to stay with the current employer. However in the informal part of the interview, the option of TW would greatly influence any future career changes.

Resilience – TW allowed employees to overcome distances (such as working when abroad or dealing with problems that are happening simultaneously in three different locations. Once this system becomes embedded in the working system, it can lead to vulnerability if there is an IT, systems or electricity failure.

Personal Wealth - Teleworking for one of the respondents was highly economically beneficial, even more so in the sense that the type of work was highly dependant on teleworking. The others did not feel that TW disaffected their economic situation. These respondents also did not completely understand the costs and benefits of TW. For example company financing of internet and mobile phone use was not seen as an additional benefit as it was seen as an intrinsic part of the pay package, even if it was availed of for personal and family use also. Also the fact that TW enabled child care or

reduced travel costs was not quantified in financial terms. One respondent reported that TW increased work opportunities.

Environmental Issues

From these indicative case studies we cannot analyse the environmental impacts of TW. This would require detailed life-cycle assessments together with other studies of different kinds of impacts such as emissions, noise and chemical pollution (example: fuel-related chemical exposure during journeys to and from work as well as indoor exposure to radon⁶⁸).

Transport – Respondents did not feel that there was any change in their commuting travel. Two also reported that on days when they worked from home, they have to make special journeys which otherwise would have been carried out as part of the commute to and from the main office. All reported having their own car, which runs on petrol. They also told the interviewer that they would always prefer to use their own car instead of the public transport as this allowed greater flexibility. What is also interesting is that all respondents noted an increase of ‘saved hours’ as a result of not commuting to a main office. Most of the saved time comes from ‘saving time’ looking for parking through avoidance of peak hour commuting, not wasting time in useless ‘chit-chat’ at work face – to- face and more important through ‘saving wasted’ time in answering unimportant or prolonged phone calls.

⁶⁸ European Council Directive 96/29/EURATOM

Resource Consumption – TW does not seem to result in improved use of space and resources. One respondent, whose organisation had tried hot-desking⁶⁹, found that employees still want their own space at the office, with the result that hot-desking was no longer used, although the facility still exists for its use. Equipment is duplicated in most cases.

Built Environment – At the moment, as there is no fixed policy for teleworking, there has not been a redesigning of the work spaces or the designation of areas within the office of home for specific uses. If TW is implemented relocation to less expensive property areas, may also be an option, together with the siting of the premises in areas which have ample parking or easy access using public transport.

Health and Safety – Respondents were not aware of any Health and Safety issues which could be attributed to TW.

Personal and Social Issues

Although respondents felt that on balance TW was beneficial, they also reported an increase in working hours. TW also sometimes caused conflict with partners and other family members. This was mainly due to the inability to draw a cut-off line between work and home life. If there was a perception of free time at home, then respondents felt obliged to check e-mails, project status, etc. This results in families feeling isolated from respondents, which in turn also placed respondents under stress.

⁶⁹ Hot-desking is to share a desk, office, or other work space between employees on different shifts or schedules.

Social Inclusion – All respondents felt socially included and did not feel isolated from work-related contacts as other work-related contacts usually telework too. They are able to keep in touch through e-mails or other internet media. This enables Teleworkers to maintain ongoing work contacts as well as establish new ones, which respondents might not have had the opportunity to network with if they did not Telework.

Community - None of the respondents reported any increased involvement in community activities or significant use of local services as a result of TW.

Quality of Life – Although all reported increased working hours, and felt that their Quality of Life had either improved or remained the same within the last 12 months. One reported a slight negative effect due to TW. This is probably due to the fact that the respondent works in excess of a 55 hour week.

Health – The same respondent reported a slightly negative effect on health, due to more stress and less exercise, together with TW causing a slightly negative impact on the partner. The other two respondents did not report any significant changes in their health, although another respondent did report that TW is causing a slight increase of conflict in the home.

SWOT ANALYSIS

The following is a SWOT analysis of Telework based on the published literature as well as interviews with key persons and case study respondents.

Strengths

- Work is no longer dependent on geography and this opens up a range of opportunities for working in new ways and environments
- Can make a substantial contribution to the three pillars of sustainable development identified at the Gothenburg summit of 2001⁷⁰ - the economy, society and environment.
- It can be a major contributor to the positive outcome of the Lisbon Strategy
- It can assist economic development, for example, through increasing staff productivity and enabling better use of office space
- It can assist the social objectives of sustainable development by, for example, balancing work with family life, or by providing work opportunities to those who might otherwise be excluded, such as the disabled or people looking after children or elderly relatives.
- It can be environmentally friendly, reducing commuting to and from work.
- Economic benefits, for example by, increased productivity but also "a better quality of work". For example, teleworkers tend to make fewer mistakes, and approach their work more creatively; reach higher productivity, reduce absenteeism and lower error rates.

⁷⁰ One of the goals of this summit was to set clear targets for EU member countries on sustainable development, or environmentally-friendly economic growth.

- In the case of absenteeism, teleworking enables workers to work when they were prevented from reaching a work location (usually through illness or transport problems)
- substantial reduction in space utilisation
- teleworking can reduce total travel substantially
- increased working hours could be less than the time saved in commuting
- can give workers a better quality of life and work-life balance.(for example - more time available for family and other activities)
- can in effect create time through opportunities for multi-tasking or greater control of activities
- health benefits due to less stress.
- using local services more and becoming more involved in their local communities
- flexibility
- being in the home environment
- convenience
- Enables workers to combine, within their own time the demands on home care and childcare.
- Autonomy
- Could lead to higher disposable income.
- Enhanced flexibility,
- Opportunities for self-expression,
- Personal liberation as one has more control over their life.

- The implementation of telework could lead to less expensive office environments, especially in the longer term
- Improvement of the quality of the services offered
- Retention of professional and/or experienced employees who would leave desk-bound employment as they have family commitments
- Reduce office space costs
- Reduce non-productive time in office (e.g., restroom chats)
- Increase revenue through more sales calls, contact with customers, etc.
- Expand service hours
- Expand labor pools
- Improve productivity (more work done per hour, week or month)
- Reduce turnover
- Reduce absenteeism and tardiness
- Improve scheduling and staffing flexibility
- Enhance recruiting and retention
- Increase "face-time" with customers and at customer sites
- Improve response time to customer inquiries and requests
- Offer customers information or deal with problems "on the spot"
- Improve communication with customers
- Enhance peak performance (by working at times when most productive)
- Maximize potential by broadening responsibilities
- Work with fewer interruptions
- Enhance personal scheduling and flexibility

- Balance work and family situations more effectively
- Avoid the time and stress of commuting
- Improve quality of life
- Save on clothing, commuting and parking costs
- Help reduce air pollution and fuel consumption
- Reduce traffic and parking congestion
- Increase electronic communication to reduce paper use
- Increase employment opportunities for those with accessibility challenges

Weaknesses

- limited exposure to the everyday environment of other employees and workplace synergies
- Could disrupt homelife as workers work longer hours
- In some cases, unpredictability and unreliability of payment
- isolation
- stress
- irregular hours
- Longer working hours - could lead to increased stress, domestic tension and other factors that reduce quality of life
- health and safety problems
- inconvenience such as being on call all the day, no separation of home/family time from work time

- staff giving up dedicated office space and working at a combination of home, hot desks and 'on the road'.
- reduction in commuting travel from teleworking could be eroded by additional travel. (For example, because an extra car is now available at home during the day, extra journeys are undertaken by teleworkers themselves or other household members).
- loss of teamwork and team spirit within teleworking populations
- Management must be trained appropriately for working with virtual teams
- Problems of management of role conflict arise and this heightens the demand of managing the boundaries between work and family relations.
- Further range of constraints are generated by the social relations of the home, which may well further undermine autonomy
- business strategies, the concepts of technology policy and organizational learning, team building, collaborative working, management and control will have to be revised
- Teleworking networks are often fragile because of the amount of institutionalised forces acting against them, e.g. the conservative attitudes of managers and workers.
- Telework introduces technical, social and 'office politics' problems as workers may feel they are passed over for promotions or training opportunities

- Workers must be trained in e-skills (The term “e-skills” encompasses a wide range of capabilities (knowledge, skills and competences) and issues with an e-skills dimension span over a number of economic and social dimensions⁷¹.)
- Continuous stress on limbs and joints, due to the very static position of the screen worker, could lead to absenteeism due to health problems
- Managers need to give permission for telework and to positively support their teleworking staff, however refusals or non-support may be rooted in a traditional management style. May result in a situation where traditional management practices block the benefits that telework can bring.
- Managers could feel disempowered and over-ruled.
- Quality is often maintained by rigorous inspection by suppliers of work, which reject and refuse payment for sub standard output, or because they may want to re-establish paternalistic ties (outdated traditional form of management).
- Security is a major consideration that must be provided for namely: Security of the remote computer, and security of the communications link.
- Duplication of resources such as desks, computers, ADSL line to office and home.

⁷¹ EU Synthesis Report of the European e-Skills Forum: "E-Skills in Europe: Towards 2010 and Beyond". September 2004. 22 pp. <http://europa.eu.int/comm/enterprise/ict/policy/doc/e-skills-forum-2004-09-fsr.pdf>

Opportunities

- Telework should provide the opportunity for organizations to shift investments away from large-scale expensive office infrastructures to more sophisticated and powerful ICTs.
- Telework constitutes a great opportunity to improve working conditions and efficiency if potential to expand local markets internationally (ex: software applications for blue-chip client bases could return significant recurring revenues through ongoing contractual arrangements).
- Technological and organisational innovation resulting in the development of original products, services and processes allows new or expanding companies to create jobs
- The technical platform provided for telework, with its communication and cooperation facilities, could also be used for on-going eLearning activities. The combination of knowledge management, telework (or eWork) and eLearning, could provide important economies and synergies.

Threats

- Teleworkers dependant on sophisticated technology which could fail or not perform properly.
- The hardware, software and network systems generally used for telework, particularly telephone standards and protocols, change rapidly. The evolution of these standards may cause output/productivity to become lower and electronic processes may function slowly, improperly or become obsolete

- Suing or threat of legal action by unhappy employer or employee over issues of Occupational Health and Safety (OH&S), legal liability, professional indemnity
- In the case of telecentres, once established with an employer, teleworkers may bypass the telecentres and choose to work from home.
- In the case of other types of teleworkers, if working for agents, these workers may approach principals and work directly for them from home

Summary of Benefits of TW

ECONOMY	ENVIRONMENT	SOCIETY
Increasing added value	Reducing travel	Greater social inclusion
Enhancing human capital	Minimising resource usage	Better health
Increasing personal wealth	Improving air quality	Improved quality of life
Creating employment	Safer working	More community involvement

Chapter 4

Recommendations for the government, unions, employers, employees and ETC

This part of the report will outline recommendations for the government, unions, employers, employees and ETC. These recommendations are based on the literature review and case study findings discussed in an earlier part of this report.

Telework has been growing in many parts of the industrialised world, and more importantly in the European Union as several Fifth Framework research projects have shown⁷². The SIBIS⁷³ project which conducted a European-wide survey estimated teleworking numbers at around 10 million in 2002. Notwithstanding this growth, to date Malta does not have any formal statistics to benchmark against other European standards, mainly because TW has not been formalised yet, although it definitely takes place on an informal or ad hoc basis.

Recommendations for the government

The government has expressed its commitment to the Lisbon Agenda and has also formulated and launched the implementation of the National Action Plan on Employment. All these initiatives are highly commendable as Telework and new forms of work organisation have become important aspects of the drive to create employment in Europe and elsewhere as well as a means to achieve a better quality of life.” The European Union and national governments within Europe are aware that the employment opportunities created by flexible and distance working must not be won at the cost of the security of individuals or equal opportunities for everyone”⁷⁴.

With these aims in mind, a task force or commission should be formed for the formal implementation and recognition of telework on a national scale. Its mandate could be to promote telework nationally and as well as to coordinate telework in the civil service.

⁷² SUSTEL IST- 2001-33228, March 2004, Policy Implications, pg.5.

⁷³ www.sibis-eu.org

⁷⁴ <http://www.euro-telework.org>

One of the first tasks could be to undertake a national survey to audit what IT skills and resources are available. This would be an exercise in benchmarking against future changes as well as to benchmark against other European countries. A definition of telework is also necessary as this will form the basis of all legal and working documentation.

The labour relation has to be redefined for legal purposes. For example at the moment according to Legal Notice 44 of 2002 of the Occupational Health and Safety Authority Act, 2000 (ACT NO. XXVII OF 2000) Work Place (Minimum Health and Safety Requirements) Regulations, 2002, “for the purposes of these regulations, a homeworker shall be considered a self-employed person” (2.3) and “these regulations shall not apply to ... temporary or mobile work sites(3b)”. The same applies to the Community directive about protection of workers concerning computer screens. Consequently, most homeworkers are in essence legally unprotected from the viewpoint of health and safety.

Also telework together with other forms of atypical forms of employment (outwork, homeworking) may need to be brought into line with the regulatory framework, which could also legislate on such issues as social insurance, health and safety aspects and working conditions. Other issues which also need to be addressed are included in the following part, Recommendations for Trade Unions.

Recommendations for unions

The introduction and growth of teleworking will certainly pose challenges to trade unions both at organisational⁷⁵ as well as at the logistical⁷⁶ levels. However unions are also more aware that new forms of working (including telework) can be beneficial to both employers as well as employees, and that telework will increase and grow as it has done in other parts of the industrialized and knowledge economies.

The motion submitted by the Danish Finansforbundet (FSU) and four other Scandinavian banking and finance unions, which was adopted at the 1995 World Congress of white-

⁷⁵ E.g. May be more difficult to recruit or maintain traditional types of communication with members.

⁷⁶ E.g. May be more difficult to organise industrial action

collar unions affiliated to FIET (Federation internationale des employes, techniciens et cadres) echoes this perception:

"For more than ten years computer-supported work outside the traditional workplace has been a practical option, so-called 'telework', 'teletravail'. There are strong indications that the number of teleworkers will increase substantially in coming years...

"Telework may be, on the one hand, a tool for employers to move work to geographical areas, where working conditions, salaries and collective bargaining rights are the poorest.

"But on the other hand, telework may be an interesting alternative for employees in certain phases of their lives, e.g. in connection with caring functions or as an attractive alternative to physical mobility due to structural changes..."⁷⁷

A similar approach was suggested in a paper by a national officer of the UK white collar union Amicus MSF ⁷⁸:

"Trade unionists are deeply suspicious of any extension of home based working. There is a long and discreditable history of, as well as on-going, exploitation of home workers. Whilst recognising the potential to liberalise the labour market many point to employers as being responsible for the rigidity of the current workplace and are scornful of the idea that they will be interested in liberating people from it..."

"MSF has no illusions about this. There are good and bad employers and there will be those who will employ people on poor pay and in unsatisfactory conditions, without safeguards. However, for trade unions, a knee jerk reaction based on the experience of worst cases is not a sufficient response. Nor does it indicate the confidence that trade unionists should feel, in the basis of their record..."⁷⁹

⁷⁷ FIET World Congress 1995, motion 44

⁷⁸ Amicus MSF(*Manufacturing Science Finance*) is the union for skilled and professional people in UK

⁷⁹ [Bill Walsh, MSF, *Teleworking - A Trade Union Perspective* (1993)] MSF (Manufacturing Science and Finance

These responses are now part of trade union's history and their pragmatic approach, a decade ago. Since then, in Europe, for instance, there has been a considerable body of formal teleworking agreements which were satisfactorily negotiated and signed between employers and trade unions and works councils. There is also a wealth of information found in publications and material available from individual trade unions on the subject of teleworking. This is to Malta's advantage as we can see what was negotiated and applied, and use this expertise to design local agreements.

Despite different contexts, similar objectives emerge from these agreements and the most salient are listed below:

- The status of the employees should not be affected in any way
- Tele-home employees should remain employees of the company and not be pushed into self-employment
- Voluntary nature of telework
- Right to return to work on company premises guaranteed
- Social contacts with the company to be maintained, for example by obliging employees to attend office periodically
- Working equipment to be supplied by employer free of charge
- Enjoy same rates of pay and conditions.
- If conditions provide for child care or other services, these too should be available for Teleworkers
- Defined number of working hours
- Right to career development, appraisals schemes and ongoing training.

These objectives are geared mainly towards employees, however a large portion of the growth in telework globally has been among the self employed. These too are workers and their basic rights should be protected. Self-employed may be members of business associations or the chambers of commerce and their interests could be furthered by these constituted bodies.

Almost half of all employed individuals in Malta between 2000 and 2002 were covered by collective agreements⁸⁰. However Trade unionists may increasingly find they could be in a position to attract more self-employed, especially those that are no longer employed in the traditional sense, including telework. It is the right of the worker (whether employed or self-employed) to have his/her rights protected and the trade unions should ensure that this is done.

In Europe, within some Member States, the social partners have already implemented agreements or guidance on telework. EPSU⁸¹ (European Federation of Public Service Unions), which represents 8 million public service workers, welcome the inter-sectoral agreement, entitled Framework Agreement on Telework⁸², which was signed in by the European inter-sectoral social partners ETUC, (European Trade Union Confederation) UNICE/UEAPME (Union des Industries de la Communauté européenne/ European Association of Craft, Small and Medium-sized Enterprises) and CEEP (European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest), together with the ex-European Commissioner Diamantopoulou, on 16 July 2002. What is indeed the novelty of this agreement, which was concluded after 8 months of negotiations, is that for the first time an EU framework agreement signed by ETUC, UNICE/UEAPME and CEEP will be implemented by their members, rather than by European legislation⁸³.

The agreement (APPENDIX I, page 86) provides a framework by which the rights and duties of employers and employees can be established and articulated, which can help facilitate the efficient and fair management of telework. EPSU and CEMR-EP encourage their members to use the agreement when discussing the introduction or management of telework, devising policies or concluding agreements on telework. However these agreements also have to be in accordance with the national procedures and practices

⁸⁰ ETC, January 2004, Research and Development Division Monthly Media Reports pg. 7, in The Times, January 8 in <http://www.etc.org.mt/nap/docs/January%202004.pdf>

⁸¹ <http://www.epsu.org/>

⁸² Framework Agreement Document, http://www.telework-mirti.org/A4_wrk1107.pdf

⁸³ <http://www.telework-mirti.org/eur-tel-agr.doc>

specific to management and labour. CEMR-EP and EPSU will monitor developments and undertake a first assessment in 2005.

This report recommends and is in agreement with the above suggestion, which is that local collective agreements as well as a national framework policy should be based on the aforementioned Framework Agreement on Telework.

Recommendations for employers

When the decision is going to be taken in favour of introducing telework, it may be best to introduce telework in phases (depending on size of organisation) or for a limited period of time (ex.: a pilot project). A core team for the management of the project should be identified and ideally this should include relevant decision makers⁸⁴ as well as end users. If an organisation has a works council, this should also be involved at a participatory level. The chosen project leader is to set objectives for the implementation project, bearing in mind the resources available and time frame. If the in-house team does not have sufficient knowledge to design and implement the project, the organisation may decide to identify the knowledge gaps and seek external or internal information sources. The team should also consider the option of involving external consultants.

The Organisation must also take into consideration other aspects, the most salient are indicated below:

Human Capital – Participants should be offered TW and not have it imposed upon them. Management must be aware that TW is not for everyone, nature of work, employees may not have space at home (if TW is going to take place from home), may not be able to work unsupervised, etc. Therefore selection must be on the basis of the principle of “double voluntariness”, i.e. employees must be willing to TW and employers must be willing to let the employees TW. The Teleworkers and employers must have an additional agreement as a supplement to their contract of work where the principal changes are regulated.

⁸⁴ Human resources, IT, Data protection, organisation or department manager involved in pilot project, etc

This agreement should include working hours, performance control, time recording, reimbursement of expenses and other criteria depending on the nature of the work and the organisation. The burden of the costs of TW should be clear and unambiguous. The agreement should also include the conditions for the termination of TW, either by the employer or employee. Employees should be instructed and informed on issues related to TW, such as who is going to own the equipment as well as the furniture which will be used when working from a mobile location or from home, maintenance responsibility, details of the insurance policy, and if there is a policy for on site inspection of the teleworkplace for health and safety reasons. There should also be organisational policies on:

- purchase of materials for home/mobile usage
- equal opportunities , paternity/maternity leave
- sickness and absenteeism
- data protection
- data security.

Organizations will have to be aware of the culture change that will have to take place as a result of TW. Organizational transformation will oversee a transition from the paradigm of the office as the focus of activity, to a paradigm in which the work itself is the focus of activity. The implication will be that the work environment will have to be considered from the perspective of how the task itself can best be performed and not from where it is performed.

Recommendations for employees

Future Teleworkers, especially those that will use their home as their main telework location, would need to take certain considerations when planning their work area. It is ideal if they can allocate a separate work area which is not frequented by other home residents especially during working hours. This may also need to conform to certain legal requirements which employees should ensure that they as well as their employers comply with. Although a lap top or note book can be used anywhere, most tasks need other types

of hardware (ex: printer, scanner). This is the reason why an allocated workspace is ideal. The workspace equipment and office furniture (chair, desk, storage cabinet) is suited to the size of the room. Together with the employer an assessment of the technology equipment should be carried out to ensure that it is compatible with that of the central workplace. The telework place may also need to be protected against unauthorised access (e.g. burglar alarm) as well as covered by insurance for hazards such as fire and theft.

Other household members should also be in accordance with the concept of teleworking from their home as they may need to allow access to third parties (such as the employer and Maltese supervisory authorities) to their residence. These supervisory authorities could include officials from Occupational Health and Safety departments as well as other types of officials which may be created by virtue of new legislation or regulations which may be needed to regularize teleworking conditions.

The organisation of the home office or any other location should be made to comply with health and safety regulations, although at the moment this legislation is not in place.

If the TW is going to take place from a mobile location (client's office, hotel room), mobile equipment available will need to be suitable for the tasks given and to be available at all times. If the equipment is going to be pooled, its responsibility and access has to be agreed to beforehand and ideally be part of the teleworking agreement. Mobile telephony must also be suitable to cover the geographical area and if possible, tested frequently for transmission dead spots. If work cannot continue due to online access loss, important applications must be available on hard disk or alternative hardware. This issue must also be included in the telework agreement because if work cannot continue it may result in hardship or serious repercussions for employer as well as employee.

Employee and employer must also establish contactability (when and for whom), such as when will the worker be available for meetings or to take phone calls or when will the employer or computer technician be on call to help with any enquiries or difficulties.

Employees will also need to be confident that TW will not hamper career development, or access to training and social activities. They also need to have access to technological

assistance as well as to persons in authority when teleworking. The performance specification for response and fault repair has to be determined and included in the TW agreement.

Sickness notification procedures should apply equally to TW the same as for other employees. They must also take into consideration that setting up the teleworkplace at home may lead to under-insurance of the home contents. They should also check with a tax consultant (especially if they are self-employed) about the fiscal effects of teleworking from home.

Recommendations for ETC

Increasing employment of older workers is a major challenge in most countries, however according to a report on the Progress in implementing the Joint Assessment Papers on employment policies in acceding countries⁸⁵, employment of older women is exceptionally low in Malta, Slovakia and Slovenia. “Significant efforts are needed with a view to reaching the EU targets agreed in Stockholm and Barcelona i.e. an employment rate for older workers of 50 % and a progressive increase of about 5 years of the exit age from the labour market by 2010. Efforts to promote active ageing include limiting the use of early retirement schemes”.

At the present moment ETC collects data as regards unemployment/employment statistics and has also expressed its commitment to find employment for the over 40's who are registering for work. Married women whose partners are earning a salary, are not given unemployment benefit when they are unemployed. These women feel highly reluctant to register for work and so they do not appear as statistically looking for work. Another reason, is that professional or skilled women find it embarrassing to register for work at the employment office and prefer to look for work on their own. In this category we would be able to find ex-bank employees, ranging from clerks to managers, ex- teachers, ex-civil servants or ex-parastatal employees. Many would have left work because they

⁸⁵ Commission of the European Communities, November 2003, Communication from the commission to the Council, the European Parliament, The European Economic and Social Committee and the Committee of the Regions. Progress in implementing the Joint Assessment Papers on employment policies in acceding countries, COM(2003) 663 final, Brussels.

were obliged to resign upon marriage or resigned to bring up their family. This unaccounted for female labour pool is ripe for employment, especially if it were offered TW as part of the incentive package. This could address the strategic goals of ETC⁸⁶ which hopes to achieve the EU targets indicated above.

Gender Issues

Research⁸⁷ has also indicated that TW may reinforce or even increase existing gender inequalities at work. The UN also publishes a core set of indicators for sustainable development. (Appendix II, page 92) of the SUSTEL report on Policy Implications⁸⁸ indicates how some of these indicators relate to TW and regards the issue of the ratio of average female wage to male wage for gender equity as highly significant. It quotes ‘breaks in employment to look after children’ as a major reason for gender wage inequality.

“If teleworking makes it easier for women to remain in employment, it can help to reduce the impact of this driver. However there is a danger that, if most teleworkers are female, they may be marginalised vis-à-vis those (mainly male) who remain office-based.”⁸⁹

The area of atypical employment especially that which employs unskilled labour, traditionally is composed of mainly by women and secondly by persons who may be physically or mentally challenged. Examples of this type of work would have included ‘piecework’. It is also an area of the labour market that is not unionised. If TW is introduced without any consideration of these factors, there is a threat that the conditions of its introduction will be determined by the organisations or companies, which in turn may exploit the unfavourable position of women in the labour market. It may also

⁸⁶ Joint Assessment of the Employment Policy Priorities of Malta, 26 October 2001, http://www.europa.eu.int/comm/employment_social/employment_analysis/japs/malta_en.pdf

⁸⁷ SUSTEL, March 2004, Sustainable Telework – Assessing and Optimising the Ecological and Social Benefits of Teleworking, Policy Implications. Report Version: 2pg 6

⁸⁸ Ibid, pgs 82, 83.

⁸⁹ Ibid. pg 83.

contribute to a greater division of labour within the family as the women will be seen as performing unimportant work, and so it should be her duty to perform this work in conjunction with other 'housework' or homecare duties.

TW, especially when it is done for a large percentage of the working time, does lead to isolation (if this is not compensated for in various ways). Isolation could lead to loss of solidarity with other workers as well as loss of self-esteem and eventually, demotivation.

It is to be recommended that when TW is introduced ETC is to ensure that it is involved in all the ongoing social partners' dialogues that may take place prior to passing of legislation and other directives. It is also suggested that training programmes could be delivered to employers as well as employees, about all the issues, positive as well as negative, that are associated with TW. This education campaign is essential for TW to be successful.

Other Measures

The Enforcement function should be radically upgraded and the field of its responsibility should be broadened, so as to encompass home based work, without invading the privacy of the family home or other mobile locations. It should be there not only as a deterrent but as a means of educating the workers on issues such as home office safety.

Other Considerations

Teleworking in Malta exists, albeit, to an unspecified amount, in the labour market. People who telework in Malta are found mainly in areas such as:

Highly qualified professionals (academics, researchers, journalists, accountants, publishers, consultants, translators) who as part of their main job, or as part-time work, work from home using IT equipment provided by themselves or the organization they work for.

Highly qualified professionals (IT Software developers or designers, researchers, academics, sales persons, consultants) who are self-employed, on a full time or part-time

basis, usually on contract work, working from home or other mobile locations, by offering their services locally and abroad.

Informal Economy

In the informal economy we find workers in a dependent labour relationship, but outside the formal labour market, usually female, or persons entitled to an invalidity pension, who offer services to the private sector on a cash basis. They may also have a semi-regularised position, whereby one person performs the work, and the spouse or next of kin receives the payment as the 'legal' part-timer. In these particular cases, the service may also be offered to the public sector. The equipment may be provided for by the employer (especially if the employer is a relative) or may be purchased by the user. This type of work usually consists of translations, word processing including proof reading, secretarial work, data entry, telesales and forms of book-keeping. These people also use IT to obtain and deliver their work, thus remaining faceless.

It must also be borne in mind that this sector of the labour market includes Maltese as well as foreigners, who may or who may not have a working permit.

It is crucial to the Maltese economy that these persons are brought into the formal economy. It may be necessary to give incentives such as fiscal allowances for use of home premises, but this should be offset by the collection of VAT and income tax. One of the ways that these could be incentivised to regularize their position at law is by making them aware that a regularized position means that the law will protect them as regards health and safety issues but more importantly when it comes to be remunerated. One informant claimed that when she is not paid for the work she does, she cannot take the employer or agent to court, so she ends up being paid less money than was agreed to, or not being remunerated at all.

Considerations of the barriers of entry for a ‘formalised’ telework acceptance

Considerations of the barriers of entry for a ‘formalised’ telework acceptance include:

- Traditional management practices in Malta are still based on the physical presence of the employee at the workplace. So much so that as IT develops, so too has been the introduction of sophisticated methods of timekeeping (palm readers, finger ID readers, Timesheets)
- Work is usually controlled by a hierarchy of personal contacts in the workplace. Access to work resources and information is also sometimes controlled through ‘secretarial’ staff who are set up as gatekeepers.
- Maltese society is predominantly individualistic and there is no culture of knowledge sharing, with the result that TW could inhibit knowledge sharing as well as creativity and innovation which is produced as a result of combined synergies.

Conclusions for Proposed National Action Plan

On a positive note, distances covered by workers in Malta are quite short in comparison to most large cities abroad, however traveling during rush hours, does cause the small distance to take a ‘longer’ time than is usually necessary. TW could positively address the rush hour phenomena as the timings that people use to go to and return from work would be spread out during the day, and on certain days could be eliminated completely. The same principle would apply to parking spaces, which are always at a premium, in all built up areas of the islands. TW could also form part of the scheme to reduce traffic especially in Valletta and TW could also form part of the initiative (Park and Ride scheme) to reduce congestion in Valletta and the surrounding areas. Persons who work in Malta and live in Gozo, or vice versa, would also benefit greatly especially if they usually commute on a daily basis.

Telecommunications infrastructure is highly organized locally, and where there may be areas that still lack development, this would be addressed by the ongoing commitment of the government and other institutions and entrepreneurs. Moreover, as telework has a role

to play in achieving the eEurope Action Plan objectives, the National Action Plan (Malta) and the Lisbon Agenda, it is imperative that the government acts as a role model for its implementation. This can be done by ushering in telework in the civil service, which in Malta, already has a good basis on which to build, through the ongoing project of e-government. It would also serve as a pioneer, and as a role model for best practice. When private industry as well as private-public organizations can start to witness the benefits of this new way of working, they too will be encouraged to try and take up the different variants of such schemes or projects.

It is being recommended that a National Action Plan for non-traditional forms of working be outlined so as to enable Telework to be brought into the national agenda. This action plan would not only ensure the smooth introduction of Telework as a new way of working in the 21st Century, but also to create standards. These standards would ensure that telework is sustainable, by guarding against negative environmental, social and economic impacts. It should also address such issues as gender and other forms of discrimination and abuse and the potential exclusion of people who wish to telework but are unable to do so. It is suggested that the Action Plan over the next year would take the following format:

1. Working group of core stakeholders to initiate a forum with the aim to deliver the Action Plan. Working group should be small so as to be manageable and affective. Ideally would include participants from government and other authorities such as ETC (Employment and Training Corporation), MITTS (Malta Information Technology and Training Services), MEU (Management and Efficiency Unit) and NCPE (National Commission for the Promotion of Equality for Men and Women), and the DIER (Department of Industrial and Employment Relations).
2. Pilot projects to start in the Public Service as well as in private enterprise by the end of this year. The role of the government is instrumental as it would act as a model for teleworking benefits and implementation. These projects would be compared and re-adjusted according to specific time frames. (For example an 18

- month project, with interim reports and necessary adjustments made every 4 months).
3. Training programmes outlined and presented. Training should include employers and employees, as well as unemployed persons (not necessarily registering for work) who wish to Telework. Training should be financed either through EU or private funding or through private-public initiatives.
 4. National Policy Framework presented with the contribution and support of all social partners and private enterprise. It should address not only the national situation, but also include aspects of cross-border harmonization (For example an analysis of the tax treatment of telework within member states with a view to achieving greater harmonization, whilst aiming to remove tax-related barriers to the growth of telework). Ideally the National Policy Framework should be concluded within the next 18 months.

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APPENDIX 1

Framework Agreement on Telework

1. General considerations

In the context of the European employment strategy, the European Council invited the social partners to negotiate agreements modernising the organisation of work, including flexible working arrangements, with the aim of making undertakings productive and competitive and achieving the necessary balance between flexibility and security.

The European Commission, in its second stage consultation of social partners on modernising and improving employment relations, invited the social partners to start negotiations on telework. On 20 September 2001, ETUC (and the liaison committee EUROCADRES/CEC), UNICE/UEAPME and CEEP announced their intention to start negotiations aimed at an agreement to be implemented by the members of the signatory parties in the Member States and in the countries of the European Economic Area.

Through them, they wished to contribute to preparing the transition to a knowledge-based economy and society as agreed by the European Council in Lisbon.

Telework covers a wide and fast evolving spectrum of circumstances and practices. For that reason, social partners have chosen a definition of telework that permits to cover 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 giving them greater autonomy in the accomplishment of their tasks. If Europe wants to make the most out of the information society, it must encourage this new form of work organisation in such a way, that flexibility and security go together and the quality of jobs is enhanced, and that the chances of disabled people on the labour market are increased.

This voluntary agreement aims at establishing a general framework at the European level to be implemented by the members of the signatory parties in accordance with the national procedures and practices specific to management and labour. The signatory parties also invite their member organisations in candidate countries to implement this agreement.

Implementation of this agreement does not constitute valid grounds to reduce the general level of protection afforded to workers in the field of this agreement. When implementing this agreement, the members of the signatory parties avoid unnecessary burdens on SMEs.

This agreement does not prejudice the right of social partners to conclude, at the appropriate level, including European level, agreements adapting and/or complementing this agreement in a manner which will take note of the specific needs of the social partners concerned.

2. Definition and scope

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 employers premises, is carried out away from those premises on a regular basis.

This agreement covers teleworkers. A teleworker is any person carrying out telework as defined above.

3. Voluntary character

Telework is voluntary for the worker and the employer concerned. Teleworking may be required as part of a worker's initial job description or it may be engaged in as a voluntary arrangement subsequently.

In both cases, the employer provides the teleworker with relevant written information in accordance with directive 91/533/EEC, including information on applicable collective agreements, description of the work to be performed, etc. The specificities of telework normally require additional written information on matters such as the department of the undertaking to which the teleworker is attached, his/her immediate superior or other persons to whom she or he can address questions of professional or personal nature, reporting arrangements, etc.

If telework is not part of the initial job description, and the employer makes an offer of telework, the worker may accept or refuse this offer. If a worker expresses the wish to opt for telework, the employer may accept or refuse this request.

The passage to telework as such, because it only modifies the way in which work is performed, does not affect the teleworker's employment status. A worker refusal to opt

for telework is not, as such, a reason for terminating the employment relationship or changing the terms and conditions of employment of that worker.

If telework is not part of the initial job description, the decision to pass to telework is reversible by individual and/or collective agreement. The reversibility could imply returning to work at the employer's premises at the worker's or at the employer's request. The modalities of this reversibility are established by individual and/or collective agreement.

4. Employment conditions

Regarding employment conditions, teleworkers benefit from the same rights, guaranteed by applicable legislation and collective agreements, as comparable workers at the employers premises. However, in order to take into account the particularities of telework, specific complementary collective and/or individual agreements may be necessary.

5. Data protection

The employer is responsible for taking the appropriate measures, notably with regard to software, to ensure the protection of data used and processed by the teleworker for professional purposes.

The employer informs the teleworker of all relevant legislation and company rules concerning data protection.

It is the teleworker's responsibility to comply with these rules.

The employer informs the teleworker in particular of:

any restrictions on the use of IT equipment or tools such as the internet, sanctions in the case of non-compliance.

6. Privacy

The employer respects the privacy of the teleworker.

If any kind of monitoring system is put in place, it needs to be proportionate to the objective and introduced in accordance with Directive 90/270 on visual display units.

7. Equipment

All questions concerning work equipment, liability and costs are clearly defined before starting telework.

As a general rule, the employer is responsible for providing, installing and maintaining the equipment necessary for regular telework unless the teleworker uses his/her own equipment.

If telework is performed on a regular basis, the employer compensates or covers the costs directly caused by the work, in particular those relating to communication.

The employer provides the teleworker with an appropriate technical support facility.

The employer has the liability, in accordance with national legislation and collective agreements, regarding costs for loss and damage to the equipment and data used by the teleworker.

The teleworker takes good care of the equipment provided to him/her and does not collect or distribute illegal material via the internet.

8. Health and safety

The employer is responsible for the protection of the occupational health and safety of the teleworker in accordance with Directive 89/391 and relevant daughter directives, national legislation and collective agreements.

The employer informs the teleworker of the company's policy on occupational health and safety, in particular requirements on visual display units. The teleworker applies these safety policies correctly.

In order to verify that the applicable health and safety provisions are correctly applied, the employer, workers' representatives and/or relevant authorities have access to the telework place, within the limits of national legislation and collective agreements. If the teleworker is working at home, such access is subject to prior notification and his/her agreement.

The teleworker is entitled to request inspection visits.

9. Organisation of work

Within the framework of applicable legislation, collective agreements and company rules, the teleworker manages the organisation of his/her working time.

The workload and performance standards of the teleworker are equivalent to those of comparable workers at the employers premises.

The employer ensures that measures are taken preventing the teleworker from being isolated from the rest of the working community in the company, such as giving him/her

the opportunity to meet with colleagues on a regular basis and access to company information.

10. Training

Teleworkers have the same access to training and career development opportunities as comparable workers at the employer's premises and are subject to the same appraisal policies as these other workers.

Teleworkers receive appropriate training targeted at the technical equipment at their disposal and at the characteristics of this form of work organisation. The teleworker's supervisor and his/her direct colleagues may also need training for this form of work and its management.

11. Collective rights issues

Teleworkers have the same collective rights as workers at the employers premises. No obstacles are put to communicating with workers representatives.

The same conditions for participating in and standing for elections to bodies representing workers or providing worker representation apply to them. Teleworkers are included in calculations for determining thresholds for bodies with worker representation in accordance with European and national law, collective agreements or practices. The establishment to which the teleworker will be attached for the purpose of exercising his/her collective rights is specified from the outset.

Worker representatives are informed and consulted on the introduction of telework in accordance with European and national legislations, collective agreements and practices.

12. Implementation and follow-up

In the context of article 139 of the Treaty, this European framework agreement shall be implemented by the members of UNICE/UEAPME, CEEP and ETUC (and the liaison committee EUROCADRES/CEC) in accordance with the procedures and practices specific to management and labour in the Member States.

This implementation will be carried out within three years after the date of signature of this agreement.

Member organisations will report on the implementation of this agreement to an ad hoc group set up by the signatory parties, under the responsibility of the social dialogue committee. This ad hoc group will prepare a joint report on the actions of implementation

taken. This report will be prepared within four years after the date of signature of this agreement .

In case of questions on the content of this agreement, member organisations involved can separately or jointly refer to the signatory parties.

The signatory parties shall review the agreement five years after the date of signature if requested by one of the signatory parties.

Brussels, 16 July 2002

APPENDIX II

IST Projects of Relevance to Telework

ASSIST - a study of the potential substitution of IST for material consumption.

<http://www.immaterialisation.org>

ATTRACT -telework techniques for the insurance sector www.cyberce.gr/attract

Beep (Best eEurope Practices)-cases and other information www.beep-eu.org

Digital Europe -cases and research on sustainable e-business www.digital-eu.org

ECATT -research and cases on teleworking in Europe www.ecatt.com

Emergence -employment relocation in the e-economy www.emergence.nu

Families -the impact of ICT on work-family interactions www.families-project.com

FlexWork -supporting flexible working amongst SMEs www.exwork.eu.com

INTELCITY - a 'road map' of how ICT can contribute to sustainable urban development over the next 30 years. <http://www.scri.salford.ac.uk/intelcity>

JANUS - <http://www.janus-eu.org>

KISEIS - examining ways in which disadvantaged groups can be helped to participate in the information society <http://www.models-research.ie/projects/kiseis>

PROTELEUSE -teleworking tools for the services sector www.cbt.es/proteleuses

SASKIA - A 'road map' of sustainable ICT development over the next 30 years.

<http://www.vtt.fi/tte/projects/saskia/docs/ws2/Descamps>

SIBIS -indicators for the e-economy, including telework www.sibis-eu.org

SANE- has developed a unified framework for the design of a sustainable workplace.

<http://www.saneproject.com/user>

SIBIS - statistical indicator development for 9 areas of the e-economy, one of which is "work". <http://www.sibis-eu.org>

STAR -economic and work impacts of new technologies www.databank.it/sta

SUSTEL- Sustainable Telework www.sustel.org

TERRA - scenarios for the ways in the Networked Society might evolve and their implications for sustainability. - <http://www.terra-2000.org/Terra-2002/index.htm>

THINK - the issues facing the physically handicapped in IST work and how their capabilities might be used. <http://www.telemanworld.com>

WWW-ICT - pathways to improve equal opportunities, women's participation and their

quality of life in or through ICT. - <http://www.ftu-namur.org/www-ict>

WISTCIS - promotion of IST in 7 CIS countries including information demonstration centres. <http://www.ednes.org/wistcis>

APPENDIX III – Excel document

Survey Document for Individual Case Studies

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