



# **Statistical Indicators on the Labour Market in the eEconomy (STILE)**

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IST-2000-31099

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## **Special Project Progress Report**

**STILE-2000-IST-31099**

October 2003

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## Part A: Identification

*Project Title:* Statistical Indicators on the Labour Market in the eEconomy  
*Project Number:* IST-2000-31099                      *Project Acronym:* STILE  
*Reporting period:* 1 November 2002 – 31 October 2003

### **Project co-ordinator**

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### **List of Partners**

<i>Partner</i>	<i>Role</i>	<i>Country</i>	<i>Budget (KEURO)</i>	<i>Person – Months</i>
Higher Institute of Labour Studies (HIVA)	C	Belgium	835.979	102
Cork Teleworking Centre (CTC)	P	Ireland	101.947	20
Institute for Employment Studies (IES)	P	United Kingdom	199.320	43
CAMIRE Estadística y Análisis, S.L. (CAMIRE)	P	Luxembourg	131.412	25
Institut für Arbeitsmarkt- und Berufsforschung (IAB)	P	Germany	104.001	17
Istituto di Ricerche Economiche e Sociali (IRES)	P	Italy	204.181	37
Organisatie voor Strategisch Arbeidsmarktonderzoek (OSA)	P	The Netherlands	176.834	31
Institute of Sociology – Hungarian Academy of Sciences (ISB)	P	Hungary	197.862	28
Central Statistical Office (CSO)	P	Ireland	51.782	11
Joanne H. Pratt Associates	Subc	USA	136.680	19

Project co-ordinator: Monique Ramioul

Date: 06 / 10 / 2003

Signature: .....

## Part B: Self Assessment form

### **B1. Assessment of work done during the reporting period**

#### **1. Workpackage 1: Project co-ordination and assessment activities**

The partners met several times during the last year. The third partner meeting was held in December 2002 – Iphofen, Germany in view of the final discussions of the first batch of projects' workpackages and the start-up of new work. The fourth partner meeting is planned in October 2003 – Budapest, Hungary. According to plan, workpackage related workshops were linked to co-ordination and planning meetings where possible. In fact the partners met on several project related events, s.a. the workpackage 3 workshop and workpackage 5 European user group on Telework in Rome (March 2003), the workpackage 3 meeting in London (June 2003) and the workpackage 3 workshop in Budapest (October 2003). The linking of workpackage specific workshops and general partner meetings allowed with the whole consortium follow-up and quality assurance of the milestones and deliverables that were to be produced, to discuss eventual problems and changes to plan, and in particular to establish relevant links between the different workpackages. Extended meeting minutes, available at the secure part of the project's website provided the conclusions of the meetings in order to have a solid basis to continuing the work.

With regards to the assessment activities, the lead partners of the finishing workpackages, workpackage 2, workpackage 4 and workpackage 5, have produced an internal note as a final assessment of the workpackage, that is completely integrated in this report. Further, specific and tailor-made assessment activities were built in the different workpackages during this second project year.

- For workpackage 2 (eWork in the LFS) a specific workshop was organised in Rome (March 2003) to get feedback from experts from NSI's (from the UK, Ireland, Austria, Hungary and Italy) and academia (Belgium). Further, the results of this project work have been discussed, where relevant, in the workpackage 5 user groups, because of the close links between these two workpackages.
- For workpackage 3 (classifications) a first discussion with NSI experts on the approach and methodology of this workpackage was also included in the Rome workshop. Second, a specific workshop is scheduled in October 2003 to assess the coding exercises, that have been carried out in the different countries. External experts from other NSI's and other relevant statistic bodies (such as OECD) are included to present their experiences and views on sectoral and coding in the New Economy.
- For workpackage 4 (feasibility study of organisational surveys) an explicit user study was carried out in order to get more insights into the requirements and interests re. organisation surveys of different policy-related stakeholders.
- The process and end result of workpackage 5 (the ad hoc module on telework) has been assessed by the US expert (see D1.1). In addition, this workpackage involved systematic peer review from statistics and scientific bodies in a systematic way to fine-tune the workpackages' work to the constituency's needs.

## 2. Workpackage 2: Extending the coding used in current national LFS

In an earlier stage of the project the workpackage 2 partners completed national reports on the possibilities to measure eWork with their national Labour Force Surveys, as well as a synthesis report (D2.1). As a result of suggestions by the reviewers of the reports, it was agreed to extend the work of this workpackage to cover the LFSs of all other EU countries and those of some Accession States. This exercise was further discussed at a next partners' meeting in Iphofen in December 2002, at meetings of national user groups, and finally presented to members of the European user group in Rome on March 6<sup>th</sup> 2003. The final report (D2.2) was delivered to the Commission.

In order to complement the Final report of workpackage 2, an additional working paper was produced on 'eWorking in France, measuring eWork in the French LFS' (available at the project's website), providing some data and exercises to go with the theory. This way the limitations and 'traps' of the LFS data were explored by looking more closely at the French LFS data for 2000 as an illustration. The difficulties of arriving at internationally comparable data by filtering out non eWorkers became clear in this exercise, whether occupation or sector or activity are used alone, or when combined with location.

This workpackage demonstrates the strongly integrated approach of the STILE project and the synergistic advantages which can be achieved by close collaboration between different workpackage teams. The research questions addressed in workpackage 2 were informed at all stages by the literature review, and discussions about definitions of eWork being undertaken within the scope of workpackage 5. In turn, the work of workpackage 2, in particular the information collected about the differing ways in which questions about eWork were asked in the UK, Irish and Austrian labour force surveys, made valuable inputs to workpackage 5 and validated its chosen approach of adopting a derived definition of eWork or telework. The results of this workpackage are also feeding positively into workpackage 3, which is examining some of the issues relating to the coding of occupations and sectors in Labour Force Surveys.

The close involvement of representatives from national statistical offices and other national stakeholders in the discussion of workpackage 2 has also been mutually advantageous: on the one hand, representatives of the national user groups have raised some interesting questions for the STILE team to take on board in relation both to this workpackage and workpackages 5 and 3; on the other hand, it has been possible to use these meetings as a means for the issues raised by STILE to become mainstreamed at a national level, thus contributing to project dissemination. In Ireland and Hungary, where the STILE team were directly involved in the design of new questions on eWork for national labour force surveys, it is clear that a major new source of data on eWork has been generated; in other countries where eWork questions already exist, such as the UK and Austria, a new impetus has been given to using these results, not just at a national level but also for the purposes of international comparison.

The comparative approach adopted by STILE to the analysis of the structure and coding of labour force surveys and the guidance given to interviewers may, we hope, make a constructive contribution to future debates about the reform of the Community Labour Force Survey and steps which might be taken in the future to improve harmonisation between national surveys.

**D2.2: Final report** - A final synthesis report incorporating an analysis of all these national surveys has now been delivered to the Commission. We hope that the results justify the considerable extra

effort which was required to collect and analyse this information. From the perspective of the project team, it was certainly valuable to obtain precise information about the ways in which eWork related issues are addressed in countries not formally participating in the STILE project, and this exercise led directly to the identification of national experts one of whom (the designer of the Austrian eWork questions in the national labour force survey) was as a result invited to attend the STILE workshop in Rome.

### **3. Workpackage 3: NACE rev. 1 and ISCO 88 (COM) classifications of eBusinesses and eWorkers**

Prior to the formal start of workpackage 3, the consortium felt that it was important to make a contribution to the debate about the NACE reform, which will be occurring due to Operation 2002 and Operation 2007 as initiated by Eurostat. For that purpose and for the start-up of this workpackage IES produced a working paper entitled: 'Will the convergence of NACE and NAICS in 2007 solve eWork measurement problems?'. The paper aimed to inform the process of Operation 2002 and Operation 2007 and to act as a basis for further discussions by the STILE partners.

The workpackage formally commenced with a kick-off discussion at the partners' meeting in Iphofen in December 2002, further developed at the Rome workshop in March, 2003. At this meeting a basis was agreed for drawing up 150 hypothetical case descriptions for occupational coding and 150 for sector coding in areas which are expected to create problems in the light of the structural and skill changes taking place in the eEconomy. This approach was further refined through email discussions between partners and at a further workshop which took place in London in June 2003. For each of the 300 cases a long and a short version was constructed. These were finalised in the beginning of July 2003 and are distributed for coding by national experts during the course of the summer.

Reports of the coding exercise will be presented at a workshop in Budapest in October 2003, along with presentations from leading experts on occupational and sectoral change. It is hoped that these papers will make both a theoretical contribution and a practical input to current discussions about the revision of classification schemes. In general, it is clear that the regular contacts with their NSI, allow the workpackage 3 partners also to remain informed regularly on the debates concerning the Eurostat NACE and ISIC reviews.

The discussions on this workpackage have benefited greatly both from inputs from other workpackages (especially workpackage 2) and from the close relations with national statistical offices and other experts developed during the course of earlier STILE workpackages. In practical terms, the work of this workpackage has also drawn on the work of other projects. For instance case studies from the EMERGENCE and TOSCA projects have provided examples of hard-to-code establishments.

It is also anticipated that workpackage 3 will make constructive inputs to future workpackages of this project, in particular workpackage 6, on occupational mobility in the eEconomy and workpackage 7, on ICT occupational profiles.

### **4. Workpackage 4: ICT feasibility study on organisational panel surveys**

The overall goal of workpackage 4's feasibility study on chances for a better monitoring of ICT occupations and activities of establishments was to check, how and by which means the method of

surveying establishments could be used to improve the monitoring of the impact of ICT technologies on establishments and their workforce.

The *technical* aspects of the feasibility study were approached by three subsequent steps, before being fed into the informational procedures on a more public level. *First*, a worldwide benchmarking inventory of existing organisational surveys was set up in quite a short time (D4.1), which was only possible, because the Belgian partner could give a large input consisting of previous work. The inventory is not only a description of 30 establishment surveys all over the world, but also a multidimensional benchmarking of their methods and contents. *Second*, out of this, the blind spots of the existing establishment/organisation surveys concerning the impact of ICT-use were identified and *third*, a modular instrument for questioning ICT- and labour market aspects in existing establishment surveys was designed, which should not only serve as a public use questioning instrument, but was also meant to be a first step of convergence, being able to standardise at least the question contents. It proved to be a very helpful condition, that the three partners, each running an own nationwide enterprise panel survey, all showed not only to have a lot of experience in surveying organisations, but also proved to be experts in various establishment-related themes of concern, from labour demand and supply to technical innovation, work structures and organisational change.

The *informational* dimension of feasibility was successfully covered by putting the results of the benchmarking inventory into the 'digital toolkit' (D4.2) and 'interactive survey website', which are part of the public section of the STILE website. This procedure was very effective and efficient, because the OSA partners, being in charge for the informational processing of the results into the digital toolkit and survey website were highly involved in the inventory research before. The usual threat of disadvantages by dividing labour between research itself and its informational processing and revealing could so successfully be avoided. But the informational dimension is not only covered by electronic media. workpackage 4 results are presented at scientific conferences, and publishing activities are still going on.

The *relational* aspect of the feasibility of ICT monitoring by organisation surveys has had two interconnected dimensions: The first one is the implementation and enhancement of scientific networks, the second one can be called 'stakeholder involvement'. As we pointed out in the final report, the borders between those two have to be regarded as fluid: scientific experts play a role in both, because they are part of or connected to scientific networks on the one hand, and members or advisors of stakeholders as collective actors on the labour market on the other hand. The STILE workpackage 4 idea to conduct an investigation on stakeholders needs proved to be a crucial tool to discover the interconnectedness between both networks – and to identify at least some basic rules, how it works. Being a part of the German labour administration, the IAB could bring in many interpersonal and interinstitutional relations to various stakeholder organisations all over Europe to enable a stakeholders' needs investigation in a relatively short time. Advices from the University of Erlangen, concerning the latest research results on the relations between social sciences and collective action were also very helpful.

The final workpackage 4 report (D4.3) summarises the relevant analytical steps and results at the end of workpackage 4 and aims to draw conclusions and to formulate suggestions for future research. The report was delivered to the commission and made available through the STILE website. The final report has to be considered as the core document of workpackage 4, covering results of the whole working period, showing the contributions of all team members and drawing substantial conclusions. Papers consisting of parts of the report are presently submitted to several

conferences and journals, to ensure proper dissemination and to keep up and enhance discussions.

Although workpackage 4 is finished, the digital toolkit has recently been updated considerably with the integration of an interactive Questionnaire and Survey Database. This database allows to search for appropriate questions on topics related to ICT's and the labour market. In addition the questions are provided with several qualifications. The variables included are question variables as well as survey variables. This allows the user to search for questions with specific features (e.g. open or closed questions) as well as for questions included in surveys with specific features (e.g. industry versus economy-wide surveys). This updating and complementing of the toolkit underpins the fact that this kind of project outcome is a 'living' research instruments instead of disappearing in archive shelves. They are subject to changes and improvements, resulting from discussions between the partners and other co-operating scientists as well as from feedback out of fielding experiences. At the root of this survey and questions database was indeed the consideration that more extended and effective peer reviews within the research community are needed when we want to contribute to scientific progress and a better understanding of organisational changes, as well as better inform policy making. This aim indeed requires flexible concepts and tools.

We hope that all this additional efforts may lead to more convergence of establishment survey methods, indicators and data collected in organisations surveys, and to an enhanced potential for analysing the processes that are affecting organisations.

## **5. Workpackage 5: Ad hoc module on telework**

The main goal of this workpackage was to develop a module that could be piggybacked to existing employee surveys in order to monitor eWork. Therefore a set of indicators, divided in 'core' and 'additional' indicators, was developed and tested in a pilot inquiry in Italy, Belgium and the UK. In Ireland and Hungary the module was tested by integrating it in the existing LF Surveys. The findings from the pilot allowed the members of the consortium who participated in this workpackage to develop a set of 6 module questions for the LFS. Thereby a common list of indicators and a translation into 14 questions to allow the creation of ad hoc modules was developed. These modules can be included in the questionnaires of preferably national LFS.

Teamwork between the various partners has added value to the work. In addition to the email discussions between the partners, the partner meetings have proved to have a synergetic power. At the Iphofen partner meeting in December 2002, the partners have brought together all experiences with the national pilot tests. The discussion on the pilot study results gave an initial impetus to the process of formulating recommendations on measuring telework. The meeting revealed difficulties concerning specific questions. To give an example, questions on the second job were too complicated and irrelevant. It also became clear that the questions on ICT usage needed some simplification. In addition to the specific questions, the discussion on the pilot experiences revealed some difficulties concerning the order of the questions. It became clear that the order of questions had an impact on the missing answers. A last interesting conclusion that could be drawn up from the test experiences concerns impact measurement. The test interviews revealed the importance of research on the (positive and negative) impact of telework on 'quality of work'. As this is not dealt with in the Labour Force Surveys, the consortium concluded not to include questions on quality of work in the core module. These characteristics are to be conceived as additional ones, characteristics that are not necessary to identify teleworkers. The discussions have introduced a provisional list of questions that was based on pilot studies with various designs in various

countries. The sharing of experiences also revealed some difficulties and opportunities for implementation of the module, allowing the consortium to draw up some practical suggestions.

The involvement of future users has proved to be very useful for bringing the work in line with the needs of the statistical and research community. The provisional list of questions was submitted to the national and European user groups' feedback. These user group meetings have been an important validation of the work. The user groups indeed emphasised and confirmed the added value of the 'derived approach', where telework is measured as a constructed variable based on the combination of three variables (distant work, intensity of distant work and use of ICT). The discussions between future users of the module also introduced some new views on the order of questions, the wordings of questions, etc. User involvement has been a prerequisite for developing a tool that takes into account practical opportunities and requirements. It resulted in a final and broadly useful list of characteristics, related indicators and examples of questions.

The discussions on the module have benefited from the work carried out in workpackage 2. The inventory of the opportunities and limitations of the Labour Force Survey (LFS) for measuring eWork has been a basis for developing a module that can be easily attached to this survey. The work on the telework module not only took advantage from the work carried out in workpackage 2, it also contributed to it. First of all the discussions on the derived approach of telework have been a source of inspiration for defining eWork.

The consortium has made special efforts for disseminating the results of the work in a userfriendly way. In a special issue of the Newsletter, it anticipates the most important questions related to the measurement of telework within the statistical and research community. The project has also been presented at various conferences (see overview dissemination activities). In Belgium for instance the project was presented to a broad group of labour market researchers. Some partners of the STILE project are involved in a rather qualitative research project, called eGap. They also presented the project at a partner meeting. Also, the specific STILE approach of telework (as a 'derived' variable) and the piggybacking method was very much appreciated, in particular by statisticians, present at the NESIS conference in Olympia, Greece (June 2002). In all these dissemination activities, the presentation of the STILE project was assessed as innovative, flexible and effective.

## **6. Workpackage 6: Mobility in the eEconomy**

Having extracted and cleaned the data, various databases and sub-databases have been constructed. Given the large number of data, especially for the European Union Labour Force Survey data (around 8 million lines), this will be a continuous process while the analyses are ongoing. The central definitions and concepts have been discussed and agreed between both the participants of STILE workpackage 6 and also NESIS workpackage 5.6. Discussion focused on definitions for the ICT sector, age groups, and knowledge as well as the various different ways of calculating mobility. All this information is provided in the first Milestone report for workpackage 6 entitled *Definitions and concepts, database development*.

Analyses, meanwhile, are ongoing. First results will be presented in October at the partner meeting before being included in the second milestone report due in December.

## **7. Workpackage 7: ICT occupational profiles**

1. At the Iphofen partner meeting (December 2002), the consortium decided to select two typical sectors to investigate in this workpackage, that would allow to identify occupational profiles in ICT occupations, illustrative for the recent tendencies in the New Economy: the sector of ICT & multimedia as an ICT-producing sector and the sector of Travel & Tourism as an ICT-using sector. Focussing on these two sectors, this workpackage will allow to give information on contemporary and future tendencies and challenges of the eEconomy. The selection of two ICT-occupations in these sectors will allow the consortium to draw up conclusions on knowledge and competences that are relevant for participants in the labour market of the eEconomy. The workpackage 7 partners started this project work with an exploration of these sectors.
2. The consortium elaborated an attractive qualitative answer to the difficulties for defining sectors and occupations in the eEconomy, that is very fast evolving. Starting with the exploration of both sectors, the consortium was confronted with the difficulties of the 'blurring of boundaries between economic activities'. To solve the problem of defining and positioning of organisations, an approach starting from the definition of the 'value chain' is very effective. In the case of Multimedia, insights into the value chain for 'producing and transmitting integrated sound, text and images' allowed a definition and positioning of the organisations. With the help of the concept of the value chain, it is possible to describe the activities of an organisation and to situate the organisation in the cluster of other ICT & multimedia organisations. For an overview of organisations involved in Travel & Tourism, the approach started from the value chain of 'producing touristic services and attracting customers'. Thanks to the qualitative, open and exploratory approach of these sectors, the workpackage 7 partners also found an answer to the difficulty of listing and positioning of ICT-occupations. Every organisation uses another technology, the same activity is translated into different job descriptions in various organisations, educational paths leading to a certain ICT-occupation are lacking, etc. In these circumstances it is not possible to make a clear and unambiguous list of occupations. The value chain approach has made it possible to delineate logically coherent clusters of ICT-related activities. This has offered a common point of reference to all the partners.
3. The consortium has made a strategic choice of occupations that are to be scrutinised into depth with the occupational profiling method. Insights into tendencies and challenges within both sectors have been at the basis for this selection. In addition to this, the consortium made an inventory of existing profiles in order to focus the STILE work on a gap in existing research on ICT occupations. The study of customer technical support and development and maintenance of 'advanced' websites will offer insights into tasks and qualification requirements for a group of labour market participants with a non-university degree. It will also illustrate the impact of tendencies and challenges within the eEconomy, such as the blurring of boundaries, fast evolving technological change, impact on the selected occupations, etc. First discussions of these workpackage milestones are planned at the partner meeting in Budapest (9-10/10/2003).
4. The extended exploration of the sectors has been a valuable preparation of the interviewing stage of this workpackage. Insights into the kinds of organisations composing the sectors made it easy for the partners to select enterprises that would offer valuable information. Thanks to the exploration of the value chain and the organisations, the partners became acquainted to a certain extent with the products and services offered and with the technologies

used. It was possible to translate the knowledge of tendencies and challenges into questions that could identify the impact on the individual job descriptions.

5. The flexible interpretation of the methods for the workpackage 7 work will allow to assess and adjust methods for developing occupational profiles. One of the objectives of the workpackage 7 work is to assess existing profiling methods on their feasibility for the eEconomy. The consortium opted for a combination of two models for occupational profiling. The so-called conference model guarantees an extended analysis of tasks and user involvement for the validation of concept profiles. The job competence model, on the other hand, is very useful as a model for structuring the results of the field research. Both models are used as a point of reference. If they are confronted with difficulties using the methods, the partners will discuss the method and opt for an alternative. The experienced difficulties will facilitate suggestions for adjustments of the existing profiling methods to the current labour market context.
6. Thanks to the clustering with the Career Space project, the STILE work can fill in gaps in the existing research on occupational profiles. What is more, the validation process of the Career Space project reveals how occupational profiles can fit to the industrial reality and how it can meet users' needs.

## **8. Workpackage 8: Dissemination**

1. Newsletters. A third and fourth edition of the project's Newsletter were issued and distributed. The project website was regularly updated in line with the work finished and ready to disseminate. Links were included to relevant other research projects or related issues or institutes. The third issue of the Newsletter mainly reported on the progress of the running and starting workpackages, but also included some information on other relevant European projects (such as WWW-ICT or NESIS) and events. The fourth edition was completely devoted to the results of workpackage 5, the ad hoc module on telework, in order to disseminate to all possibly interested target audiences this project's outcome.
2. All the consortium partners have been involved in several dissemination activities of very different nature (articles, presentations, chairing of debates at conferences, etc.). In addition, several cluster initiatives with relevant research projects have been undertaken. This clustering varied between exchange of information and findings (e.g. with SUSTEL, FAMILIES, EGAP, CLAMOUR), mutual participation in project related expert groups (WWW-ICT, NESIS) to mutual agreements on the workplans and the use of concepts and definitions (NESIS).

A detailed list of dissemination and cluster activities is included under the heading C8 Specific Activities.

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**B2. Current project status**


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<i>As at (end of reporting date)</i>	<i>Number</i>	<i>Comments, problems with deadlines</i>
Deliverables submitted during reporting period ( <i>Details in F</i> )	D1.1 D2.1 D2.2 D4.3 D5.2 D5.3 D8.1 D8.2  D8.1	<ul style="list-style-type: none"> <li>• Intermediate Assessment Report</li> <li>• (Revised) National reports</li> <li>• Final report</li> <li>• Final report</li> <li>• Eurostat recommendations</li> <li>• Final report</li> <li>• Third Newsletter, widely distributed</li> <li>• Project website, incl. partners' closed part for sharing documents (under continuous updating)</li> <li>• Fourth Newsletter, widely distributed</li> </ul>
Deliverables acknowledged by EUROSTAT		
Late deliverables - for reporting period	D4.3	In order to integrate fully the results of the stakeholders' study of needs a delay was asked (agreed on the Panel review meeting of November 2002)

### B3. Work done

Are project objectives being met? Grade from 0 (not at all) to 4 (totally)	Score	Comments
Innovative methodologies and content on the statistical monitoring of the labour market in the eEconomy to support the statistic requirements of the IST Programme	3	<ul style="list-style-type: none"> <li>• Three workpackages contributing to this general objective are finalised (ad hoc module, measuring eWork in the CLFS and Organisational survey research)</li> <li>• Three other workpackages (coding, mobility and occupational profiles) are on going</li> </ul>
An extension of the coding of the Community Labour Force Survey (CLFS) to take into account eWork by generating data at a more disaggregated level for selected categories; to derive recommendations as to where extensions of the current coding processes can provide more detail and more information about eWork	4	<p><i>Work finalised</i></p> <ul style="list-style-type: none"> <li>• 7 national reports completed</li> <li>• Initial synthesis report completed</li> <li>• Additional analysis carried out on 8 further national LFSs</li> <li>• Illustrative data-analysis on the French LFS completed</li> <li>• Final synthesis report completed</li> </ul>
Best practice recommendations on how NACE rev. 1 and ISCO could be updated to better account for eBusiness and eWork	2	<p><i>Work in progress</i></p> <ul style="list-style-type: none"> <li>• Discussion paper completed and delivered</li> <li>• Framework for case identification and analysis agreed</li> <li>• 300 fictive cases constructed</li> <li>• Coding procedures agreed</li> <li>• Coding exercises on going in different NSI's</li> <li>• First international workshop 8/10/2003</li> </ul>
Benchmarks on the methods of existing organisational panel surveys in the way they take into account ICT-related indicators with reference to (internal) labour market issues. To generate the innovation process of monitoring systems by disseminating best practices and by designing and developing instruments for monitoring ICT-related labour market issues, thus maximising the effectiveness and cost-efficiency of short-term surveying of organisational changes related to the penetration of ICT	4	<ul style="list-style-type: none"> <li>• Benchmark of surveys reported</li> <li>• Digital toolkit constructed and recently updated. Changes to digital toolkit and modular instrument resulting from various feedbacks. Questionnaire and Survey Database included at the website</li> <li>• Survey Module constructed</li> <li>• Study of stakeholders completed</li> <li>• Action plan formulated</li> <li>• Final report delivered</li> </ul>
An internationally standardised indicator to measure telework effectively, and a set of reliable and valid questions as a module to be added onto existing national and European Labour Force Surveys in order to maximise the effectiveness and cost-efficiency of short-term monitoring of the dissemination of telework as a key new work pattern in the Information Society	4	<ul style="list-style-type: none"> <li>• The ad hoc module provides a set of questions for employee surveys</li> <li>• User involvement (user groups with statisticians and academics) has ensured the usefulness and the feasibility of the module</li> <li>• Recommendations of implementation possibilities are finalised and included in the final report</li> <li>• Final report on measuring telework is finalised</li> <li>• The project is presented at various conferences, and to relevant other EU funded projects. A special issue of the Newsletter has been finalised and widely distributed. The consortium is prepared to assist future users for making a customised translation of the module (on request)</li> </ul>

Are project objectives being met? <i>Grade from 0 (not at all) to 4 (totally)</i>	Score	Comments
Data on the sectoral mobility in ICT, using Eurostat LFS and, as a reference, administrative data	1	<p><i>Work in progress</i></p> <ul style="list-style-type: none"> <li>• Concepts and definitions agreed</li> <li>• Cluster activities carried out</li> <li>• Data extracted, cleaned, databases constructed</li> <li>• Milestone 6.1 completed</li> <li>• Analysis ongoing</li> </ul>
Occupational profiles of two ICT-related occupations, including the identification of required qualifications, training needs, type of contracts and the likely future developments in these areas. In order to reach standardised descriptions of these occupational profiles, a clear and effective methodology and process, involving directly the relevant stakeholders (employees, employers, training experts) is applied and renewed. A comparison of the occupational profiles of Belgium, Italy, Hungary, the Netherlands and the US allows to benchmark and to detect specific qualification and training needs, according to the differences in ICT penetration	1	<p><i>Work in progress</i></p> <ul style="list-style-type: none"> <li>• The explorational stage on the basis of a literature review has been finalised in month 19. M7.1 is now available. The finalisation of the concept profiles is expected for month 25. The final report (D7.1) is provided for month 28</li> <li>• Discussion between the partners on the experiences with the interviews and the translation of the results into two profiles will give a last input for finalising the national concept profiles</li> <li>• All partners will validate their national concept profiles in a stakeholder conference or in another valid way</li> <li>• The results of the various validation processes will be collected. This 'experience sharing' will give an initial impetus to the report on the occupational profiles and the conference process (D7.1). A first international comparison will lead to national benchmarks</li> <li>• A more thorough international comparison is planned afterwards and will be reported on at the end of month 33. It will pay special attention on international differences in qualification and training needs</li> <li>• The collection of all partners' flexible interpretation of the existing profiling methodologies (a combination of the 'conference' and the 'job competence' model) will allow the consortium to assess the methods and to adjust it to the eEconomic circumstances. This methodological question will be reported on at the end of month 34</li> </ul>
Widely distributed user-friendly reports, a project website and Newsletter, and a concluding European conference on the statistical monitoring of the labour market in the eEconomy, targeted at policymakers, scientists, representatives of statistical bodies and all relevant users	2	<p><i>Work in progress continuously</i></p> <ul style="list-style-type: none"> <li>• Newsletters on schedule and widely distributed</li> <li>• Website regularly updated</li> <li>• Considerable cluster activities with relevant other projects and presentations or participation at various events have taken place/ are planned with the available findings and end products</li> </ul>
Is work done within the project budget?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Comments</i>

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**B4. Outline proposed changes to plan (*Details in D*)**

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**1. Workpackage 1: Project co-ordination and assessment activities**

No changes to plan have occurred in this reporting period.

**2. Workpackage 2: Extending the coding in the current national LFS**

Changes to plan as agreed at the Panel Review Meeting of 18/11/2002 are carried out.

**3. Workpackage 3: NACE rev. 1 and ISCO 88 (COM) classifications of eBusinesses and eWorkers**

Since the Belgian NSI is currently understaffed, they could not be directly involved in the coding exercise planned in this workpackage. Therefore the Belgian team contacted the Dutch NSI (Central Bureau of Statistics) who co-operate with the consortium for the coding exercise (in Dutch).

**4. Workpackage 4: ICT feasibility study on organisational panel surveys**

The digital toolkit has recently been updated considerably with the integration of an interactive Questionnaire and Survey Database.

**5. Workpackage 5: Ad hoc module on telework**

No changes to plan have occurred in this reporting period.

**6. Workpackage 6: Mobility in the eEconomy**

None to date.

**7. Workpackage 7: ICT occupational profiles**

None to date.

**8. Workpackage 8: Dissemination**

None to date.

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**B5. Plans for Implementation and/or Exploitation (*Details in E*)**

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**Workpackage 5: Ad hoc module on telework**

1. Assist future users for making a customised translation of the telework module, if the consortium is requested for.
2. Assess experiences with insertion of some questions from the module into the 'ICT household module' that was attached to the Irish QNHS questionnaire in June 2003.

**B6. EUROSTAT observations**

*(to be completed by EUROSTAT Project Officer)*

Persons consulted:

EUROSTAT Project Officer: .....

Date: / /2003

Signature: .....

## Part C. Synopsis of Work Undertaken

*This section should be kept factual and normally will not exceed 15 pages in length. It should draw the attention of the reviewers to the key elements of the project. Supporting information should be included in annex.*

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### C1. Project activities

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Workpackage	Within the reporting period (01/11/2002 – 31/10/2003)		Since the start of the project (01/11/2001 – 31/10/2003)	
	Manpower planned	Manpower used	Manpower planned	Manpower used
WP1	9	8	18	16,5
WP2	6	13,22	55	53,68
WP3	31	27,94	31	27,94
WP4	0	4,32	32	35,21
WP5	11	17,63	71	80,52
WP6	17,5	15,5	17,5	15,5
WP7	43	40,57	43	40,57
WP8	3	2,5	6	5

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## C2. Partners Contribution

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Partner	Within the reporting period (01/11/2002 – 31/10/2003)		Since the start of the project (01/11/2001 – 31/10/2003)	
	Manpower planned	Manpower used	Manpower planned	Manpower used
Higher Institute for Labour Studies (HIVA)	36	39,85	76	78,4
Cork Teleworking Centre (CTC)	6	9,48	18	15,78
Institute for Employment Studies (IES)	17	18	41	47,8
CAMIRE Estadística y Análisis, S.L. (CAMIRE)	11,5	12,6	17,5	16,1
Institut für Arbeitsmarkt- und Berufsforschung (IAB)	3	4	15	15
Istituto di Ricerche Economiche e Sociali (IRES)	14	14	33	33
Organisatie voor Strategisch Arbeidsmarktonderzoek (OSA)	9	8,05	27	26,04
Institute of Sociology – Hungarian Academy of Sciences (ISB)	12	11,7	22	18,8
Central Statistical Office (CSO)	3	3	9	9
Joanne H. Pratt Associates (subcontractor)	9	9	15	15

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## C4. Work done

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### 1. Work package 1: Project co-ordination and assessment activities

#### *Project meetings held*

- Kinsale (Ireland), 15 May 2002: Workshop workpackage 4.
- Kinsale (Ireland), 16-17 May 2002: STILE partner meeting.
- Ghent (Belgium), 29 May 2002: European user group meeting workpackage 5.
- Iphofen (Nürnberg) (Germany), 9-10 December 2002: STILE partner meeting.
- Rome (Italy), 6 March 2003: European user group meeting workpackage 5.
- Rome (Italy), 7 March 2003: Workshop workpackage 3.
- London (UK), 4 June 2003. Workshop workpackage 3.
- Budapest (HU), 8 October 2003, International Workshop workpackage 3.

- Budapest (HU), 9-10 October 2003, STILE partner meeting.

#### *Assessment activities to date*

- Annual Progress report (SPPR) in preparation of the Panel Review Meeting 18/11/2002.
- External assessment of workpackage 5 (see D1.1).
- Internal final assessment by the lead partners of the finished workpackages (workpackage 2, workpackage 4 and workpackage 5) fully integrated in this report (mainly in part B).
- Tailormade and built-in assessment through systematic user involvement (workpackage 5 and workpackage 2), workshops with external experts (workpackage 3, workpackage 7), cluster initiatives (workpackage 3, workpackage 6, workpackage 7) and study of users' needs (workpackage 4).

## **2. Workpackage 2: Extending the coding in the current national LFS**

1. Building on the work carried out in the previous year, and after intensive discussion at the partners' meeting in Kinsale and in national user groups, the partners completed national reports on the labour force surveys of Belgium, France, Ireland, Italy, Luxembourg, the Netherlands and the UK, together with a synthesis report.
2. The main results of this exercise were presented in summary both to the STILE European user group in Ghent on May 28<sup>th</sup>, 2002 and to the project review meeting held on the same day.
3. These reports were delivered to the Commission and discussed in greater depth at the panel project review meeting in Luxembourg.
4. As a result of suggestions by the reviewers, it was agreed to extend the work of this workpackage to cover the labour force surveys of all other EU countries together with those of some Accession States. This exercise was further discussed at a further partners' meeting in Iphofen in December 2002, at meetings of national user groups, and finally presented to members of the European user group in Rome on March 6<sup>th</sup> 2003.
5. Furthermore suggestions for the routing of questions which aim to measure eWork and interview guidelines, were formulated. These recommendations were added to the existing research results and assembled in the final report (D2.2): 'The missing E: the use of national elements of the LFS for eWork analysis'.
6. In order to complement the Final report of workpackage 2, a more extended working paper was produced on 'eWorking in France, measuring eWork in the French LFS', providing some data and exercises to go with the theory as an illustration.
7. A final synthesis report incorporating an analysis of all these national surveys has now been delivered to the Commission.

## **3. Workpackage 3: NACE rev. 1 and ISCO 88 (COM) classifications of eBusinesses and eWorkers**

1. Prior to the formal commencement of this workpackage, it was felt important to make a contribution to the debate about the changes to NACE that will be occurring due to Operation 2002 and Operation 2007. Accordingly, IES has produced a working paper entitled: 'Will the Conver-

gence of NACE and NAICS in 2007 Solve eWork Measurement Problems?'. This is designed both to inform the process of Operation 2002 and Operation 2007 as well as act as the basis for further discussions by the STILE partners.

2. The workpackage formally commenced with a kick-off discussion at the partners' meeting in Iphofen in December 2002, further developed at the Rome workshop in March, 2003. At this meeting a basis was agreed for drawing up 150 hypothetical case descriptions for occupational coding and 150 for sector coding in areas which might be expected to create problems in the light of the structural and skill changes taking place in the eEconomy. This approach was further refined through email discussions between partners and at a further workshop which took place in London in June 2003. The 300 cases were finalised by the end of June 2003 and were ready for coding by national experts from NSI's during the course of the summer. Discussions about these coding processes are planned at the international workshop (8/10/2003) and at the STILE partner meeting (9-10/10/2003) in Budapest.
3. All the partners involved in this workpackage, contacted their national Statistics Institutes to organise the different coding exercises (Ireland, UK, Germany, Hungary and Belgium). Since the Belgian NSI is currently understaffed, they could not be directly involved in the coding exercise. Therefore the Belgian team contacted the Dutch CBS who co-operate with the consortium for the coding exercise. This collaboration also allowed to establish more close and systematic working relationships with this NSI (CBS) for other STILE workpackages (such as workpackage 7 on occupational profiling) and for exchanging information on the CLAMOUR project, in which the Dutch CBS is a partner.
4. Reports of the on-going coding exercises will be presented at a workshop in Budapest in October 2003, along with presentations from leading experts on occupational and sectoral change.
5. Thanks to their contacts with their NSI, it is also possible for the workpackage 3 partners to remain informed regularly on the debates concerning the Eurostat NACE and ISIC reviews.
6. In practical terms, the work of this workpackage has also drawn on the work of other projects. For instance case studies from the EMERGENCE and TOSCA projects have provided examples of hard-to-code establishments.
7. It is also anticipated that workpackage 3 will make constructive inputs to future workpackages of this project, in particular workpackage 6, on occupational mobility in the eEconomy and workpackage 7, on ICT occupational profiles.

#### **4. Workpackage 4: ICT feasibility study on organisational panel surveys**

In the second reporting period of the STILE project, workpackage 4 has ended its tasks, quite corresponding with the time schedule of the overall STILE project. The following items represent the finishing period of workpackage 4's activities.

- The digital toolkit (D4.2) is completed, the final report (D4.3) gives a detailed description of its facilities, allowing researchers to find assistance in developing and finding appropriate survey questions for depicting the impact of ICT on enterprises

- The study of stakeholders needs (M4.3) was completed in December 2002, leading to interesting and fruitful insights into political procedures related to improving establishment-based ICT- and labour market monitoring in- and outside the scientific communities and political actors.
- Drawing conclusions out of the stakeholders' needs investigation, the strategic action plan (M4.5) shows a direction for further activities, developing the idea of a bottom-up convergence strategy of an Europe-wide integration of establishment-based labour market research
- **D4.3: Final report.** This report summarises the relevant analytical steps and results at the end of workpackage 4 and aims to draw conclusions and to formulate suggestions for future research. The report was delivered to the commission and made available through the STILE website.
- Recently the digital toolkit has recently being updated considerably with the integration of an interactive Questionnaire and Survey Database. This database allows to search for appropriate questions on topics related to ICT's and the labour market. In addition the questions are provided with several qualifications. The variables included are question variables as well as survey variables.

## 5. Workpackage 5: Ad hoc module on telework

In a previous phase within the project, a bibliography containing state-of-the-art literature on measuring eWork was constructed. Next to this the project website, with a secure part only accessible for members of the consortium, was developed. Both of these were constantly further developed and the latest deliverables and other material was made accessible through the website.

The main goal of this workpackage was to develop a module that could be piggybacked to existing employee surveys in order to monitor eWork. Therefore a set of indicators, divided in 'core' and 'additional' indicators, was developed and tested in a pilot inquiry in Italy, Belgium and the UK. In Ireland and Hungary the module was tested by integrating it in the existing LF Surveys. The findings from the pilot allowed the members of the consortium who participated in this workpackage to develop a set of 6 module questions for the LFS. Thereby a common list of indicators and a translation into 14 questions to allow the creation of ad hoc modules was developed. These modules can be included in the questionnaires of preferably national LFS.

**D5.2: 'Recommendations for the introduction of an ad hoc module on telework in the Labour Force Surveys'** This deliverable is specially aimed at Eurostat, since the decision whether or not to include questions in a survey is often a political one. Therefore the findings from the pilot test in workpackage 5 were translated into clear recommendations.

**D5.3 Final report.** Apart from the 'recommendations' that were mentioned above the workpackage 5 partners assembled the most important findings from their work in a final report. The report contains recommendations with regard to the module, the opportunities for analysis that are offered by the module when it's combined with core characteristics of the working population. Suggestions for implementation strategies of the module for a variety of relevant surveys are listed.

## 6. Workpackage 6: Mobility in the eEconomy

1. This workpackage was due to start in February 2003 but instead was started in November 2002 in order to provide additional added value to the project. To this end, two notable activities took place. The first was to organise two cluster meetings with another project contracted under the IST programme: NESIS. Since, the most obvious collaboration was between workpackages, clustering has concentrated on this level, namely between STILE workpackage 6 and NESIS workpackage 5.6. Both of these meetings took place in Luxembourg, with the result that agreements have been reached on consistent methodological approaches to ensure that comparison of results between the two can be more easily achieved. In addition, both partners in workpackage 6 have participated in a workshop hosted by NESIS concerning the measurement of stocks and flows in the new information economy, at which papers were presented. The second activity was to present and discuss the workpackage plan at the partners' meeting in Iphofen in December 2002.
2. Since then, data from the various sources have been extracted, cleaned and restructured. Many processes have been automated in order to reduce costs and time. Thorough documentation of methodological and coding decision-making has been of crucial importance in this phase for the subsequent quality and accuracy of the resulting data and indicators. Databases have been developed in line with the analyses that are expected to be carried out for the final report.
3. The first milestone report — *Definitions and concepts, database development* — has been completed. It provides an introduction to the issues and challenges confronted in the development of this workpackage with an overview of the various methodological questions that should be posed when developing indicators on Mobility in the eEconomy, linking in these questions with the necessary reality of the available data and the structure and form in which it comes. As such, key themes are how to measure mobility, the eEconomy and knowledge. Following this methodological discussion, a summary of the steps taken in the database development is provided, underlining the necessary procedures in the database management process as well as the thematic organisation of the data for both partners.
4. The analyses are ongoing, with specific focus given on various different socio-economic themes. Results of the first analyses will be presented at the next partner meeting in October 2003 before they are included in the second milestone report, planned for December.
5. Efforts will be made to cross-cluster activities between this and workpackages 3 and 7 at the next partner meeting, having already identified various possibilities to do so.

## 7. Workpackage 7: ICT occupational profiles

1. The final objective of this workpackage is threefold. First of all the partners are to develop occupational profiles of two ICT-related occupations, including the identification of the required qualifications, training needs and the future developments in all of this. Secondly, they will make a regional comparison of the profiles in order to detect regional specific qualification and training needs, linked to regional differences in ICT penetration. Thirdly, the consortium is to assess and update existing profiling methodologies.

2. In order to obtain these objectives, the consortium has started the work with an extended study of two sectors.

The focus was on two sectors that incorporate very well the tendencies and challenges of the eEconomy; the sector of ICT & multimedia, as an ICT producing sector, and the sector of Travel & Tourism, as an ICT using sector. On the basis of an extensive literature review and contacts within the field, the partners made an inventory of the composition of the sectors and tried to sketch important socio-economic tendencies, challenges and expected future developments. Each participating country (Belgium, Hungary, Italy, Netherlands and USA) made an overview of the organisations that compose both sectors. The analysis of the tendencies and challenges paid special attention to the tendency of the blurring between boundaries in the sector of ICT & multimedia. For the sector of Travel & Tourism, the discussion on desintermediation as a result of the integration of ICT in the service delivering process was central to the analysis. The exploratory stage ended up with an overview of ICT occupations that are relevant within the sectors. A general concluding document was prepared on both sectors as a major milestone in this workpackage, paying special attention to regional differences.

3. These insights have led to a selection of two clusters of activities that were relevant to be scrutinised in depth in all countries. The consortium decided to analyse the cluster of customer technical support and that of development and maintenance of 'advanced websites'.
4. In a following stage, the partners started to collect data on the content of these occupations and on the qualifications requirements. Based on the existing 'conference model', the researchers organised interviews with HR representatives or team leaders and with job tenants. In these interviews they collected information on the products and services, the organisation of work, career paths, training needs and initiatives, knowledge management, tasks to be carried out, etc. Reports of these interviews are translated into extended overviews of tasks. These are to be translated into qualifications requirements.
5. The WP7 clusters with the work carried out in the Career Space project (CS). The Belgian WP7 partner participated in the Virtual Community for the validation of the CS projects. This allows the consortium to get insight into the criteria the academic and the industrial world put forward when assessing occupational profiles. It also learns how they conceive ICT occupations in the eEconomy.

## **8. Workpackage 8: Dissemination**

1. Newsletters. A third and fourth edition of the project's Newsletter were issued and distributed. The project website was regularly updated in line with the work finished and ready to disseminate. Links were included to relevant other research projects or related issues or institutes. The third issue of the Newsletter mainly reported on the progress of the running and starting workpackages, but also included some information on other relevant European projects (such as WWW-ICT or NESIS) and events. The fourth edition was completely devoted to the results of workpackage 5, the ad hoc module on telework, in order to disseminate to all possibly interested target audiences this project's outcome.
2. Dissemination activities. In addition, several cluster initiatives have been undertaken (see below for a more detailed list).

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## **C5. Problems encountered**

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### **1. Workpackage 1: Project co-ordination and assessment activities**

No problems to report.

### **2. Workpackage 2: Extending the coding used in current national LFS**

A lot of additional information was gathered by studying the additional LFS's (Spain, Finland, Greece, Germany, ...), with special attention for the Eurostat modules. It was useful to take into account also the national modules. Here the problem was that not all national modules were available in English and had to be translated first. The extra work of analysing additional LFS's and translating the modules required an additional effort to include the findings in D2.2 in time.

### **3. Workpackage 3: NACE rev. 1 and ISCO 88 (COM) classifications of eBusinesses and eWorkers**

The descriptions for occupational and sector coding were dealing with areas where coding problems could be expected. The workpackage team constructed a 'matrix' to organise the case descriptions and the aim was to get at least one case in the 'extreme right-hand' and one in the 'extreme left-hand' columns and larger numbers of cases near the 'faultline'. Because all case descriptions were based on existing ones, it was not always obvious to fit the cases into this matrix, that is based on the theoretical framework.

In most countries we didn't encounter many problems to obtain the co-operation from NSI's. Only in Belgium the NSI was not able to co-operate in the coding process because of understaffing problems. Therefore the Belgian team contacted the Dutch CBS for coding the descriptions (in Dutch). The advantage of this collaboration is furthermore that the CBS is directly involved in the CLAMOUR project and in research on new occupations, thus allowing to exchange findings in a more systematic way with workpackage 3 and with workpackage 7.

### **4. Workpackage 4: ICT feasibility study on organisational panel surveys**

Employers themselves don't seem to be primarily interested in research on the level of establishments. But employers federations seem to have some more interest, on the one hand related to political debates on the nature, solutions, practices and hindrances of entrepreneurs' behaviour, on the other hand caused by the role of economists, acting as teachers and advisors of employers' federations experts. Administrative bodies also showed a lot of interest, but most interestingly trade unions, on the other hand, showed a lot of interest in the issues covered by the panel surveys. This difference is of importance for the project, since trade unions are often neglected in raising stakeholder support for establishment-based labour market monitoring activities.

### **5. Workpackage 5: Ad hoc module on telework**

The pilot testing of the eWork module (see also part C3) has been carried out in different participating countries (Belgium, Italy and the United Kingdom). The shape of the pilot testing differs from country to country, depending on the national opportunities.

When putting together the sample, an attempt was made to ensure the typological representation of the population under analysis (workers and eWorkers), and to include a sufficient number of eWorkers to allow the functioning of specific questions on telework to be tested. The main problem encountered in each country was to find a good sample of eWorkers, to give some significance to our results.

Other problems were related to single questions, for instance the “work activity” description: they are listed in detail in D5.2. These problems have been discussed extensively at the European user group meeting in Rome (March 2003) with academics as representatives of several NSI’s (Italy, Hungary, the UK, Ireland, Belgium).

## **6. Workpackage 6: Mobility in the eEconomy**

The main problem encountered concerning the use of labour force survey data is the definition of ICT used. Labour force survey data were requested at the three digit level of NACE, but are available only for a minority of countries. To provide indicators for all EU and available Acceding and Candidate countries, the definition used has to differ slightly from that agreed by the 1998 Working Party Meeting on Indicators for the Information Society and used in *Measuring the ICT sector* (OECD, 2000). Tests have been carried out to minimise the effect of these differences on the final results. Furthermore, the individual’s field of study is not available in the data extraction.

## **7. Workpackage 7: ICT occupational profiles**

At the beginning of the work on the ICT occupational profiles the consortium was confronted with the problem of defining the ‘subject of analysis. It was not obvious to define the sector and the occupations that are to be scrutinised in depth. The current economic environment is characterised by an ever-evolving technological integration, a growing penetration of ICT in all kinds of organisations, flexibility measures of organisations that are to compete at a global level, etc. In this context boundaries between organisations and between sectors are blurring. The integration of ICT throughout all aspects of economic activities makes it difficult to distinguish ICT occupations from occupations making intensively use of ICT. In addition, there are some new occupations that are not ‘institutionalised’ yet, they are still ‘under construction’. Therefore, it is not possible to define a fixed list of ICT occupations.

In answer to these problems, the consortium has opted for a rather qualitative approach for defining sectors and occupations. An overview of ICT & multimedia organisations is based on insights into the value chain of producing and transmitting ICT and multimedia services. The same has been done for an overview of touristic organisations.

Working with the concept of the value chain, it has become clear that this approach allows to give a focused description of an organisation. It also allows to better position organisations within the economic field. The approach has made it possible to define the kind of organisations that were subject of the analysis.

For the occupations the same approach was chosen. Based on an overview of the value chain the consortium succeeded in delineating relevant clusters of logically coherent activities. Instead of focussing the further research on a well-determined and rather fixed occupation, the partners saw the opportunity and the relevance of making an inventory of activity clusters to address the aims and objectives of this workpackage.

## **8. Workpackage 8: Dissemination**

No problems to report.

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## **C6. Changes to the project plan**

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### **1. Workpackage 2: Extending the coding used in current national LFS**

In a previous review it was suggested to include other countries and new Accession States in the review of the various national LFS's. These additional surveys were analysed by IES and the findings were incorporated in the final synthesis report D2.2. The findings from the Austrian survey in particular proved to be very relevant for the further work within the project, especially in workpackage 5.

### **2. Workpackage 3: NACE rev. 1 and ISCO 88 (COM) classifications of eBusinesses and eWorkers**

Since the goal of this workpackage was to analyse the coding of occupations and economic activities the partners in this workpackage developed 150 occupational and 150 sector descriptions. Through discussions among the partners in this project, together with other participants to the Kick-off in Iphofen and the workshops in Rome it became clear that the level of detail of the descriptions would influence the coding considerably. It was therefore decided to develop two versions of each description. A first short version would serve as a (fictional) answer on the question 'What is your occupation? / What is the main activity of the company where you work?'. The second, longer version of the description was constructed as an answer when the interviewer asks for further details about the occupation/activity. Both the short and the long descriptions will be coded as pairs or unpaired, in accordance with the normal coding practices in each participating country. The proposed methodology will probably reveal additional information about variety in coding practice when the coder has more or less detailed information about the case.

### **3. Workpackage 4: ICT feasibility study on organisational panel surveys**

Due to technical delays while conducting the stakeholders' needs investigation, there was a one month delay to the delivery of the final report, which then in fact took place in the first days of 2003. This delay did not exceed the budget line of workpackage 4, there are no substantial changes to the project plans.

### **4. Workpackage 5: Ad hoc module on telework**

Right from the start, a short-term decision was imposed in this workpackage to tackle the problem of identifying eWork: the Irish CSO planned to include questions on telework in Q3 2002 of the Irish LFS. In addition, the Irish National Statistics Board considers including a telework ad-hoc module in Q3 2003. Also, the Hungarian LFS considers including eWork questions at the very short term. Likewise, the coming reform of the Italian LFS had to be assessed with regard to the opportunities to have an input from this workpackage. With respect to these developments, the STILE consortium revised its time schedules already at the kick-off meeting (month 1) and in particular

the agenda for the Irish partner in workpackage 5. Indeed, the Irish partners had to be fully prepared for proposing brief telework questions by February 2002.

### **5. Workpackage 6: Mobility in the eEconomy**

This workpackage was due to start in February 2003 but instead was started in November 2002 in order to provide additional added value to the project. To this end, two notable activities took place. The first was to organise two cluster meetings with another project contracted under the IST programme: NESIS. In addition, both partners in workpackage 6 have participated in a workshop hosted by NESIS concerning the measurement of stocks and flows in the new information economy, at which papers were presented. The second activity was to present and discuss the workpackage plan at the partners' meeting in Iphofen in December 2002.

### **6. Workpackage 7: ICT occupational profiles**

The workpackage 7 partners have broadened the focus of the work. As ICT occupations are not only employed in the ICT sector, but also in ICT using sectors, the consortium concluded not to restrict the study to the sector of ICT and Telecom. As the tourist sector has integrated the Internet into the service delivery process, this sector was selected as another relevant sector. The tourist sector makes use of eCommerce applications of the Internet for making available online reservation and even booking services. Insights into the tendencies within this sector and into the profile of a relevant ICT occupation can be a valuable basis for making prospects on tendencies in a future economy in which eCommerce is a more widespread practice.

The constantly changing conditions, the broad variety of ICT services and products and of organisations involved in its production, the low rate of institutionalisation of ICT occupations that are still 'under construction', makes it difficult for the consortium to focus on a well defined occupation. Therefore, it concluded to focus the work on 'coherent clusters of activities'.

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## **C7. Impact of the previous review, if any**

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### **1. Workpackage 2: Extending the coding used in current national LFS**

The workpackage team requested for extension of time (without extra funding) to carry out additional tasks required by the reviewers, such as the analysis of LFS questionnaires of countries not involved in the STILE consortium. The reviewers requested a revised deliverable D2.1 due to this extension of the report with more countries.

The consortium has taken into account these requests. In addition to the revised D2.1 deliverable, including the analysis of the LFS questionnaires and modules of the other countries, the team also included into the final report recommendations on routing and interview guidelines. The analysis of in particular the Austrian LFS and the way telework issues are included in this survey, proved to be very inspiring and had a major impact on the outcome of workpackage 5 concerning a.o. the sequence of the questions in the telework module.

Further, a complementary paper was produced on 'eWorking in France, measuring eWork in the French LFS' (available at the website), providing some data and exercises. This way the limitations

and ‘traps’ of the LFS data were explored by looking more closely at the French LFS data for 2000 as an illustration. The difficulties of arriving at internationally comparable data by filtering out non-eWorkers became clear in this exercise, whether occupation or sector or activity are used alone, or when combined with location. This also resulted in a useful input for workpackage 3 where the sectoral and occupational classification issues could be better identified.

## **2. Workpackage 4: ICT feasibility study on organisational panel surveys**

The reviewers stressed the importance of the uptake of the digital toolkit across the EU and to make use of flexible concepts and benchmarking. To take this into account, the team produced an additional and more interactive Survey and Questionnaire Database to be integrated in the Digital Toolkit on the project’s website. This updating and complementing of the toolkit underpins the fact that this kind of project outcome needs indeed to be a ‘dynamic’ project outcome. At the root of this survey and questions database was indeed the consideration that more extended and effective peer reviews within the research community are needed when we want to contribute to scientific progress and a better understanding of organisational changes, as well as better inform policy making. This aim requires flexible concepts and tools.

Regarding the ambitious goal for more convergence of the existing organisation surveys, the workpackage team received a lot of confirmation about the importance and relevance of these surveys during the ‘study of the stakeholders’ needs’. However, the dispersed organisation at the European level of establishment panel surveys also made clear that this is goal of more convergence is not reachable just like that within the project’s lifetime. The project team wanted however to contribute to the process of convergence with the updated Digital Toolkit by stimulating discussion within the research community. In addition, the focused dissemination of this project’s outcome may stress this strategy towards more convergence and exchange (see also dissemination activities).

## **3. Workpackage 5: Ad hoc module on telework**

The reviewers asked the workpackage 5 team to consider other possible surveys apart from the CLFS concerning the implementation of the ad hoc module on telework. An overview of possible carrier surveys is indeed collected and integrated in the Final Report of this workpackage. The fourth edition of the project’s Newsletter was completely devoted to the ad hoc module and has been distributed widely.

Generally, the feed back on the ad hoc module is very positively, in particular from academia involved in telework-research. The consortium’s assessment of developing ad hoc modules leads to the conclusion that it is very important to develop close contacts with statistical institutes in order to get in-process feedback, to raise awareness and to disseminate the project’s outcome effectively. However, the organisation in terms of procedures and political decision making processes of the major European statistical instruments, such as the Community Labour Force Survey, makes an effective uptake of the project’s results not obvious at the short term, and this long-term objective certainly exceeds the scope and ambitions of the project.

The reviewers asked for paper copies of the deliverable D5.1 Pilot Test. This report has been sent to the Commission Services as requested.

## 1. User representation groups

Right from the start of the STILE project the involvement of 'target groups' for our research output has always been of significant importance. In the time-span this review report is dealing with workpackage 3 and workpackage 5 put the most effort in networking with user representation groups.

The STILE partners who were involved in workpackage 3 worked closely together with the user groups of NACE and ISCO. From the kick-off meetings in Iphofen and the workshop in Rome the Irish CSO the ONS from the UK and the NSI from Hungary were drawn in the discussion process concerning the construction of occupational and sector descriptions and the 'matrix structure' that formed the theoretical framework. As such these institutes could immediately affirm their co-operation in coding the descriptions and they could assist in constructing the material for the coders. This way of working in close relation with the user representation groups ensures the usefulness and relevance of the work that is done in workpackage 3.

In the context of workpackage 5 national user groups were assembled in Ireland, Hungary, Italy, and Belgium in order to discuss possible indicators to monitor eWork and their strengths and weaknesses. These user groups consisted of experienced scientists and representatives of statistics bodies. The list of national user group members and the minutes of the meetings are available on the secure part of the website. Due to the fact the eWork questions are already included in the UK LFS, the input of the UK consisted in an assessment made in bilateral consultation of national experts on their experiences with the eWork questions in the UK LFS and on the extraction of tables to illustrate the strengths and weaknesses of the questions actually included in the UK LFS.

As a result of the discussions in the user groups and the findings of other research projects (such as EMERGENCE, ECATT, SIBIS) there was however felt a clear need for broadening the eWork concept from the 'traditional 'telehomework' to eWork, covering better actual developments in the economy and referring to all (individual forms of) ICT-related distance work. A too narrow definition does not take into account the wide variety of new work patterns that are disseminated as a result of a widespread implementation of ICT. In addition, the added value compared to the existing eWork research was the challenge not only to focus on readiness and intensity of eWork, but also on its impact. This broader perspective is crucial to assess the chances and risk of eWork in terms of social inclusion or exclusion. As a result, the awareness within the consortium of a longer-term perspective in monitoring eWork was felt to be essential. This concern was strongly confirmed in some national user groups, although the need for short-term usable module and easy-to-include questions was emphasised at the same time. In addition, the national user groups revealed, to some extent, different national accents in measuring eWork (e.g. quality of working life versus telecommuting concerns).

The consortium also organised a second European user group meeting in Rome (March 2003). This user group meeting has assessed the final recommendations on measuring eWork. This has resulted in a practically feasible list of indicators that are essential for measuring eWork. Thanks to the involvement of representatives of National Statistical Institutes and of academics, the final result can be supported by a broad group of potential future users.

## **2. Validation activities**

In order to develop a useful module to monitor eWork in workpackage 5, which would at the same time meet the needs of the future users, a pilot test to analyse the feasibility of the telework questions was executed. As a result of the pilot test three groups of questions could be detected.

First of all there are the telework questions, namely the questions essential to pinpoint and characterise eWorkers. Secondly, there are the additional questions chosen amongst those which provided significant additional information on telework. Lastly, the other questions useful for any qualitative analyses into telework provided some interesting information during the pilot surveys. These questions were asked for the main and for the second job. The pilot surveys conducted in the four countries (Belgium, Italy, UK and Hungary) made it possible to test the questions and they served as an assessment of the practicability of their insertion in the statistical surveys on the labour force.

In general it can be concluded that the decision to resort to the combination of three different variables (place of work, use of ICT technologies and intensity of telework) to detect the teleworkers is very productive. This allows the definitions of telework to be used flexibly thus closer to the users' requirements.

The pilot test has illustrated that the method of piggybacking a limited module to an existing survey offers opportunities to find answers to various research questions. The main advantage is the efficiency with which it can be measured. The inclusion of three simple questions offers entry to a lot of opportunities to combine indicators.

Notwithstanding the opportunities of the module that is developed within the STILE project, the test has revealed some deficiencies of the module. First of all it has become clear that researching telework patterns in the second job is less important. The results have shown an extremely low percentage of respondents teleworking in their second job. As ad hoc modules to the LFS need to be simple and compact it is advisable to restrict the telework questions only to the main job. Secondly, the test has revealed certain difficulties with the module of telework questions. The difficulties experienced are translated into smooth adaptations of the definitive module.

The unforeseen opportunity to add STILE questions to the Irish labour force survey allowed to collect data on a representative sample of a national population. By doing so the strategy of cross-tabulating data to further the understanding of distant work could also be tested.

Hungary also tested core questions on their LFS. However, the incidence of telework in Hungary turned out to be very small. Responses suggested that there was some confusion about the intent of the questions, which may have resulted in an undercount of teleworkers. The Hungarian LFS provided extremely valuable insights into the types of questions and phrasing that work well - and excellent details of those that do not. Together the four pilots and particularly the Irish survey proved the validity of the STILE approach in actual practice.

## **3. Dissemination activities**

The dissemination activities executed in the course of the STILE project continued along the same lines as during earlier phases within the project. The website, where all reports are made available for the broad public, remains an important dissemination channel.

Apart from the website the STILE Newsletter is published and disseminated regularly. The fourth Newsletter is finalised and sent out. This fourth Newsletter is a special issue and reports entirely on the module to monitor eWork, which was developed within workpackage 5. It tells its readers in a useful and applicable way 'How to measure eWork'.

For workpackage 4, the Organisational Survey research, the consortium had the opportunity to update to a considerable extent the digital toolkit, originally constructed in the frame of workpackage 4. This updating consists of the integration at the project's website of a Survey and Questionnaire Database, aiming at everyone involved in organisational survey research. The database contains the questions included in the major surveys discussed in this 'deliverable'. It provides best practices and allows to detect 'blind spots' in the relationship between ICT's and the labour market. The database allows to search for appropriate questions on topics related to ICT's and the labour market. In addition the questions are provided with several qualifications (question as well as survey variables). This allows the user to search for questions with specific features (e.g. open or closed questions) as well as for questions included in surveys with specific features (e.g. industry versus economy-wide surveys). This way, the consortium hopes that more extended and effective peer reviews within the research community are possible. This exchange of experience and peer review are needed when we want to contribute to scientific progress and a better understanding of organisational changes, as well as to better inform policy making. We hope that this may lead to more convergence of survey research, indicators and data.

Above we already mentioned the involvement of future users in the activities within the consortium. Thereby the fact that members of this consortium regularly participate in National, European and worldwide conferences is important for the dissemination of the results and the 'branding' of the project. During the coming partner meeting in Budapest, Hungary the first discussion with regard to the organisation of the final conference (at the end of the project) will take place. This will be a crucial aspect in the dissemination of STILE output and a starting point for the further and wider dissemination via articles, and the participation in scientific events.

Below is the list of the most important dissemination activities carried out to date by the members of the STILE consortium. Since the experience taught us that the user groups that are organised in the course of the project serve as important awareness raising and dissemination opportunities, these are included in this list.

#### Dissemination activities

- Distribution STILE Newsletters.
- Conference 'ICT & eWork @ work in Ireland', Kilkenny, 18/11/2002; organised by Telework Ireland and the Irish Internet Association.
- Paper 'La diffusione del telelavoro in Italia. I risultati di alcune ricerche e studi di caso negli ultimi anni' (Telework in Italy. Result of research and case study of last years) presented at 'Il telelavoro nelle Cooperative di servizi e turismo' (Telework into cooperative of services and tourism), Turin, 31/01/2003; organised by the LegaCoop of Turin (the association of cooperative).
- February 2003: supply information on STILE project activities and results to Irish government eWork action forum for inclusion in the Forum's final report to the Irish parliament.
- 20 February 2003: CSO launch results of telework module from the Quarterly National Household Survey. CTC attended the launch in Dublin and gave interviews to RTE television and RTE radio on background to the telework figures.

- Colloque DARES: Aux sources des transformations du travail: stratégies d'entreprises, évolution de l'offre, systèmes technique, Paris, 26/03/2003.
- Paper presented at the Slovak-Czech conference with international presence. New Trends in Employment – telework, Bratislava, 27-28/03/2003.
- April 2003: Prepare report of Slovakia conference for Teleworker magazine including information on STILE project.
- April 2003: send copies of the Irish government's eWork action forum final report, including information on STILE, to Peter Johnston and John Nolan, EU Commission DGXIII.
- April 2003: Presentation of STILE results during a learning professional course in Perugia, about *Aspetti organizzativi del telelavoro* (Organizational aspect of telework).
- Real work in a virtual world: the human impact of organisational transformation in a digital global economy, Vienna, Austria, 12-13/05/2003.
- July 2003: summary of project for dissemination to NSOs.
- Conference 'Towards a Knowledge Society', Rotterdam, 27-29/08/2003.
- 'User Group Meeting', STILE project – workpackage 7, Organised by the Institute of Sociology Budapest. (Participants: representatives of the IT (interactive media) and tourist sectors, of the academic community and experts from the Central Statistical Office, 22nd July 2003.
- 'International Seminar on the New Economy and Skill Development' co-organised by the *Institute of Sociology – Hungarian Academy of Sciences* and the *Scottish Centre for Employment Research – Strathclyde University, Department of Human Resource Management*. Topics discussed: 'IT Jobs', 11th September 2003; 'The New Economy: All High Skill?', 16th September 2003; 'Knowledge Work on the Periphery of the EU', 18th September 2003.
- Informatikai Vállalkozók Országos Szövetsége (National Association of Hungarian Firms in the IT Sector) ([www.ivosz.hu](http://www.ivosz.hu)) discussed the national report (Éva Tot – Csaba Makó – Péter Tamási (2003). Occupational Profiling in an Orientation Stage – National Report for the Initial Exploration: Hungary), STILE Project, workpackage 7, Budapest, Institute of Sociology – Hungarian Academy of Sciences.
- The Hungarian National Report on the IT and Tourist Sectors is available – in Hungarian – on the Web-site of the 'Research Group of Sociology of Organisation and Work – Institute of Sociology, Hungarian Academy of Sciences: [www.socio.mta.hu/sow](http://www.socio.mta.hu/sow).
- Information exchange on workpackage 7 and workpackage 3 with Luc Liessens of the Flemish Service for Employment and Vocational Training, focusing on the difficulties for coding and profiling occupations related to the New Economy.
- Information sent on request to Diane Gabrielle Tremblay of the Télé-Université Canada.
- Information sent on request from the Flemish minister of Economy Ceysens.
- Information sent on request to the project co-ordinator of CLAMOUR.
- Information sent on request to the project co-ordinator of REGIONAL-IST.
- Information on workpackage 5 sent on request to Irena Svetin of the Statistical Office of the Republic of Slovenia.

#### Articles and publications envisaged

- Contribution in the OECD IT Outlook 2004.
- Contribution in eWork 2003 Status Report.
- Contributions in Over-Werk, Journal on Labour Market Research, Steunpunt Werkgelegenheid, Arbeid en Vorming.
- May 2003: article on teleworking for Smart Company magazine.
- Bollen A, Ramioul M., 2003, *Telewerk in beeld. Uitdagingen voor de statistische en de wetenschappelijke wereld*, Paper presented at the Labour Market Researchers' day, organised by Steunpunt Werkgelegenheid, Arbeid en Vorming, 26<sup>th</sup> May, Brussels.

- June 2003: article for PC Live magazine (main consumer computer magazine published in Ireland) on current status of teleworking including description of the STILE project work.
- Publication of QNHS adhoc module on telework, 20<sup>th</sup> February 2003.
- Makó, Cs. (2002): Az e-munka helyzete Közép-Európában (eWork in Central Europe) *INFO-Társadalomtudomány (Info-Social Science)*. No. 58.
- Tot, É. (2003): Nemzeti Jelentés: Magyarország (IT szektor és a turizmus példája) (National report: Hungary – the IT sector and tourism), Budapest: Institute of Sociology – Hungarian Academy of Sciences, April.
- Csizmadia, P. – Makó, Cs. (2003): „Kisvállalkozások együttműködése az új médiaszektorban”, (Co-operation of small firms in the interactive media sector), STILE Project (workpackage 7), Budapest, Institute of Sociology – Hungarian Academy of Sciences, April.
- Csizmadia, P. – Makó, Cs. (2003): „Gazdasági hálózatok működtetésének problémái: egy interaktív média projekt példája’ (Interactive media project: an example of networking), STILE Project (workpackage 7), Budapest, Institute of Sociology – Hungarian Academy of Sciences, May.

In the future all important papers/presentations/articles will be put onto the website to disseminate the results of the STILE project for the larger public of practitioners and for the scientific and educational communities.

In addition to these dissemination activities several clustering contacts have been established with relevant research projects, aiming at exchanging information, fine-tuning concepts and definitions and assessing each others approaches and results.

#### Cluster activities

- E-Gap
  - Presentation by IRES and ISB and discussion with partners involved in European E-Gap project (<http://www.egap-eu.com>) during the last partner meeting (Tampere June 26-27, 2003). STILE Newsletters were distributed and the STILE workpackage 5 results were discussed in detail. For the E-Gap project our results were very interesting because the team have conducted some qualitative interviews in SME focused on telework opinions and telework diffusion. Similar difficulties were found with the description of the telework concept. So, the STILE way to measure telework was appreciated.
  - Exchange project results with Lars Schmidt (SUSTEL) via email.
- Career Space
  - Workshop kick-off meeting Career Space consortium-Cedefop-CEPIS, Brussels, 16/04/2003.
  - Participation in the Virtual Community for the validation of the Career Space occupational profiles and the Curriculum guidelines.
- WWW-ICT
  - Mid-term workshop and scientific committee, 29/09/2003.
  - Participation of the STILE co-ordinator in the scientific advisory committee as external assessor.

- NESIS
  - Papers presented at the Workshop on knowledge stocks and flows, Helsinki, 10-11/03/2003.
  - Participation at the first Indicator Development Working Group, Athens, 10-11/04/2003.
  - Participation at the second Indicator Development Working Group, Brussels, 13-14/11/2003.
- CLAMOUR
  - Invitation at the workpackage 3 workshop in Budapest (8/10/2003) to give a presentation on the model developed within CLAMOUR to better classify business in the New Economy.
- REGIONALIST-IST
  - Participation and paper presented at the first advisory FORUM meeting, Brussels, 29/03/2003.
  - Workpackage 6: Mobility in the eEconomy: One important clustering activity has been with the IST programme funded NESIS project. Since, the most obvious collaboration was between workpackages, clustering has concentrated on this level, namely between STILE workpackage 6 and NESIS workpackage 5.6. Two meetings were held in order to discuss and agree upon definitions common to the two projects. In addition, both partners in workpackage 6 have participated in a workshop hosted by NESIS concerning the measurement of stocks and flows in the new information economy, at which papers were presented.

#### Other relevant planned activities

- STILE project presentation at the Company Survey on Working Time - Expert Group meeting, European Foundation of the Improvement of Living and Working Conditions, Dublin, 7/10/2003.
- STILE project presentation at the eChallenges e-2003 conference, Bologna, 22-24/10/2003.
- STILE project presentation at the EPROS conference, Luxembourg, 30-31/10/2003.
- STILE project presentation at the Congress 'Integrating Europe. Potential and Performance of the Social Sciences in the Process of EU Enlargement', Vienna, 23-26/11/2003.
- STILE project presentation at the Statistical workshop in conjunction with the World Summit on Information Society 'Monitoring the Information Society: Data, Measurement and Methods', Geneva, 8-9/12/2003; organised by UNECE, UNCTAD, ITU, UNESCO Inst. of Statistics, OECD, Eurostat.
- Presentation at the Workshops at the European Foundation conference 'European Knowledge Society Foresight – the Missing Link between technology foresight and the Lisbon objectives', Brussels, 21-22/11/2003.
- Presentation at the Conference 'New Planning Techniques for Mobility, Connectivity and Accessibility', Dublin, 27/11/2003; organised by the Irish Planning Institute.
- IRES is in strict contact with Istat to discuss the possibility to collaborate on a Telework project.

## Part D - Future project plans

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### D1. 1 Summary

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#### 1. **Workpackage 1: Project co-ordination and assessment activities**

A last partner meeting is planned for the Spring of 2004, to discuss the draft reports and milestones at hand and to prepare the final projects' conference.

Further, the planned assessment activities for the running workpackages will be organised in due course.

- For workpackage 6 (mobility) the assessment of the workpackage outcome will be provided by members of a relevant expert network, ENMOB, European Network on Human Mobility (which aims to study human mobility as a mechanism of knowledge distribution and to contribute to the development of S&T indicators related to Human Mobility).
- The assessment of the work of workpackage 7 (occupational profiles) will be provided, at the one hand, by the US subcontractor, who will bring in the US developments as a supplementary benchmark. On the other hand, peer review is provided in this workpackage by the systematic involvement of stakeholders in 'conferences' (including employers, employee representatives, training experts, ...) that serve as a validity mechanism for the development of the occupational profiles.

#### 2. **Workpackage 3: NACE rev. 1 and ISCO 88 (COM) classifications of eBusinesses and eWorkers**

A workshop is planned on October 8<sup>th</sup> in Hungary with invited external experts to discuss the state of the art in occupational and sector coding in the eEconomy, present the interim results of this workpackage and submit them to peer review. The results of the workshop will make an input into the final report of this workpackage.

The results of the coding exercise (taking place in summer/autumn 2003) will be analysed and distributed to National Statistics Institutes, together with recommendations designed to produce greater consistency in coding and assist in the measurement of eBusiness and eWork.

Thanks to the close collaboration with several National Statistics Institutes (UK, Ireland, Hungary, Germany and The Netherlands), this WP team is regularly informed about the Eurostat discussions and work on the NACE and ISCO reviews. Input in these discussions are therefore more easily possible.

#### 3. **Workpackage 5: ad hoc module on telework**

The consortium is prepared to assist future users for making a customised translation of the module (on request). The Irish partner has already made a customised translation of the module. It developed two questions that were inserted in an ICT household module that was attached to the QNHS questionnaire of June 2003. An assessment of the process of making this customised translation as well as of the results, will be an important basis for assisting future users to make a customised translation.

#### **4. Workpackage 6: Mobility in the eEconomy**

The final report for this workpackage will be provided in June 2004. As such, the analyses are ongoing. Specific focus for the analysis is given to the various different socio-economic themes of interest to reveal determinants of the mobility of ICT workers (flows within and between the ICT sector/other branches, the skills base of the inflows, links to more general measurements of the ICT sector by gender, age or type of occupation). A variety of measurements are being used to gain insight into these movements (both direct flow and proxy measurements). In addition, this workpackage team will try to formulate suggestions on more precise measurements of labour market mobility within the LFS. These suggestions will also be discussed within the ENMOB network, where both workpackage institutes are included as partners.

#### **5. Workpackage 7: ICT occupational profiles**

At the start the main focus of workpackage 7 was on the exploration of two sectors employing ICT occupations. In a first stage, each partner made a picture of the composition of the sectors, the tendencies and challenges the sectors are confronted with and the organisational answers formulated to these challenges. In a second stage of the explorational study, special attention was paid to ICT occupations in the sectors. Insights into the occupations and the tendencies and challenges led to a final selection of two occupations that is the subject of further research efforts within this workpackage.

In the next stage of this workpackage, the team started field work. The various partners collected information on the content of the occupations, on the organisation of work in the various enterprises, selection and recruitment policies, career opportunities, etc. These findings are translated into a list of tasks and related qualification requirements. A discussion on the experiences and provisional conclusions in the partner meeting (partner meeting Budapest, 9-10 October 2003) will reveal specific points of attention for the various national profiles. These provisional profiles will be submitted to the feedback of people having experience with the occupations and of future users of the profile. In a following stage, the partners started to collect data on the content of these occupations and on the qualifications requirements. Based on the existing 'conference model', the researchers organised interviews with HR representatives or team leaders and with job tenants. In these interviews they collected information on the products and services, the organisation of work, career paths, training needs and initiatives, knowledge management, tasks to be carried out, etc. Reports of these interviews are translated into extended overviews of tasks. These are to be translated into qualifications requirement

#### **6. Workpackage 8: Dissemination**

At the short term, some presentations on the project's outcome are envisaged (see list above)

Cluster activities, that have been initiated, will be deepened. In particular, closer exchange of information and project outcome is envisaged with CLAMOUR (workpackage 3), WWW-ICT (workpackage 7), NESIS (workpackage 6).

Two additional editions of the Newsletter will be issued, reporting on the results at hand. The project website will continuously be updated.

The project includes a European conference on the Statistics and Indicators on the Labour Market in the eEconomy. The main findings of all the different workpackages will be presented to a wide range of national, European and international stakeholders. A first discussion on the concept of the conference is envisaged at the partner meeting of October 2003.

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**D1.2 Update of the project programme, if any**

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No changes to the project programme.

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**D1.3 Dependencies and relationships**

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Not applicable.

<p style="text-align: center;"><b>Part E - Plans for Demonstration, Exploitation, Implementation and expected achievements</b></p>
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Since the project is an Accompanying Measure, all deliverables are belonging to the European Commission and a Technology Implementation Plan has not to be developed. In previous sections, attention has been paid to explain the valorisation and dissemination activities of the project.

**E7.1 Final Deliverable Description Sheet**

Reference number	Title	Date due	Date submitted	Target date if overdue
D1.1	Intermediate assessment report <i>Project assessment. Indicators on telework</i>	05/2003	05/2003	

**Executive summary of the deliverables, description of its purpose.**

The process and end result of workpackage 5 (the ad hoc module on telework) has been assessed by US expert, with reference to relevant US developments on the issue of measurement of telework. The efficiency, effectiveness and relevance of the work developed within the framework of workpackage 5 are evaluated.

**When available**

Exists and available from the STILE website as PDF files.

**Type**

Report

**Client(s)/User(s)**

The STILE consortium, and in particular the workpackage 5 team, is the first group to have interest in the evaluation of their work. Second, the European Commission officials have an interest in the assessment by external assessors of the project they funded. The target audience of the workpackage 5 outcome, such as NSI, can be interested in similar developments on measuring telework in the US.

**Benefits**

The report compares similar exercises and discussions in the US with the debate on telework measurement in Europe. Further some future perspectives are included.

**Other Comments**

**E7.1 Final Deliverable Description Sheet**

Reference number	Title	Date due	Date submitted	Target date if overdue
D2.1	National Labour Force eWork Related Differences Analysis of the potential use of the national LFS in eWork	08/2002	08/2002 (revised version 03/2003)	

**Executive summary of the deliverables, description of its purpose.**

A series of national reports covering the eWork related differences in the national Labour Force Surveys in 16 European countries. These reports identify and describe the national questions that are useful when analysing eWork.

**When available**

Exists and available from the STILE website as PDF files.

**Type**

Reports

**Client(s)/User(s)**

Those wishing to develop and undertake comparable statistical analyses of eWork using the CLFS and various national LFS.

**Benefits**

Detailed national reports that are designed to underpin a synthesis report covering the whole of the EU.

**Other Comments**

**E7.1 Final Deliverable Description Sheet**

Reference number	Title	Date due	Date submitted	Target date if overdue
D2.2	Final report <i>The missing E. The use of national elements of the LFS for eWork analysis</i>	02/2003	02/2003 (revised version 03/2003)	

**Executive summary of the deliverables, description of its purpose.**

Summarises the project's findings on the extent to which existing LFSs in Europe can be used to capture eWork and makes recommendations for how best practice in specific countries can be extended.

**When available**

Exists and available from the STILE website as PDF files.

**Type**

Reports

**Client(s)/User(s)**

Aimed at National Statistics bodies, policy makers, the research community and others with an interest in monitoring the development of eWork in Europe and improving existing data collection instruments.

**Benefits**

Clarifies definitional issues, makes practical suggestions for interviewer guidance, routing and coding as well as the analysis of results. Complements the work of workpackage 5.

**Other Comments**

**E7.1 Final Deliverable Description Sheet**

Reference number	Title	Date due	Date submitted	Target date if overdue
D4.3	Final report <i>Towards convergence? Current state and future ways of establishment based ICT- and labour market monitoring in Europe</i>	11/2002	01/2003	

**Executive summary of the deliverables, description of its purpose.**

Describing the relevant activities and results of the whole workpackage 4, being a complete feasibility study with analytical parts, describing the present state of establishment-based ICT- and labour market research by doing international comparison, as well as the interests of labour market actors concerning this type of research. Also contains practical parts, both describing the informations and instruments developed for the use of establishment researchers, and showing possible ways for a future integration of Europe-wide efforts in establishment monitoring of ICT- and labour market items.

**When available**

Exists and available from the STILE website as PDF file.

**Type**

Report

**Client(s)/User(s)**

Scientists, politicians, labour administrators, government officials, experts from unions and employers federations.

**Benefits**

Information and practical advice concerning how to close the 'meso'-gap in statistical informations on the labour market. Monitoring the neglected 'demand side' on the labour market, measuring the impact they are going through by information and communication technologies.

**Other Comments**

### E7.1 Final Deliverable Description Sheet

Reference number	Title	Date due	Date submitted	Target date if overdue
D5.2	Recommendations for the introduction of an ad hoc module on telework in the Labour Force Surveys	02/2003	02/2003	

#### **Executive summary of the deliverables, description of its purpose.**

The recommendations give a description of the objectives of the workpackage. Based on the pilot study results, it gives an overview of the adjusted list of questions that can be attached to the Labour Force Survey. It also illustrates the flexibility with which comparable typologies can be constructed. In a last part the work makes some recommendations on the implementation of a module, including a list of possible other carrier surveys for the telework module.

#### **When available**

Exists and available from the STILE website as PDF file.

#### **Type**

Report

#### **Client(s)/User(s)**

National Statistical Offices, administrating the Labour Force Survey; Eurostat, administrating the Community Labour Force Survey; Administrators of large scale employee surveys.

#### **Benefits**

The module allows a flexible definition of telework without losing comparability, it allows to collect a lot of information with a minimum of additional efforts, the module can be easily attached to the LFS.

#### **Other Comments**

### E7.1 Final Deliverable Description Sheet

Reference number	Title	Date due	Date submitted	Target date if overdue
D5.3	Final report <i>Working at a distance. How to know about it?</i>	03/2003	03/2003	

#### **Executive summary of the deliverables, description of its purpose.**

The final report gives an elaborated description of the pilot study in the various countries. It illustrates how the module can be used to define teleworkers and to explore the characteristics of the teleworking population. In a last part it presents the module as a list of characteristics and indicators and some implementation strategies, resulting from the pilot study and a broad process of user involvement.

#### **When available**

Exists and available from the STILE website as PDF file.

#### **Type**

Report

#### **Client(s)/User(s)**

National Statistical Offices, administrating the Labour Force Survey; Eurostat, administrating the Community Labour Force Survey; Administrators of large scale employee surveys; Researchers interested in telework; Organisations wanting to organise a survey in preparation of telework measures, etc.

#### **Benefits**

The module in the final report allows a flexible definition of telework without losing comparability, it allows to collect a lot of information with a minimum of additional efforts, the module can be easily attached to existing questionnaires without having a fundamental impact on the carrier questionnaire, the module can be used very broadly, the consortium can assist future users to make a customised translation of the module.

#### **Other Comments**

**E7.1 Final Deliverable Description Sheet**

Reference number	Title	Date due	Date submitted	Target date if overdue
D8.1	Third STILE Newsletter Fourth STILE Newsletter	02/2003 09/2003	02/2003 09/2003	

**Executive summary of the deliverables, description of its purpose.**

The Newsletters are designed to report on the most relevant outcomes of the project to the different target audiences and is widely distributed to an email-list (continuously updated) and at all possible events (conferences and cluster activities in particular). The fourth edition is devoted to the outcome of workpackage 5 on measuring telework.

**When available**

Exists and available from the STILE website as PDF files.

**Type**

Leaflets

**Client(s)/User(s)**

Scientific community, ESS, international statistics bodies, Eurostat and IST constituencies, labour market policy responsables at different levels, employer and employee organisations, related FP5 and other scientific projects

**Benefits**

Important dissemination and promotion instrument for the project allowing to keep the different target audiences informed about work in progress and results. Will be issued every six months.

**Other Comments**

The fourth edition is a special 'promotion' leaflet of the outcome of workpackage 5 aimed for a very wide distribution of the telework module.