

Statistics and Indicators on the Labour Market in the eEconomy

Recommendations for the introduction of an ad hoc module on telework in the Labour Force Surveys

Edited by
Francesca della Ratta and
Cristina Oteri



Workpackage 5: Ad hoc module on telework
Deliverable 5.2: Report on measuring telework in the CLFS, incl. strategic action plan and recommendations to Eurostat



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Introduction: objectives of workpackage 5

The aim of workpackage 5 is the identification of comparable indicators, useful to measure and monitor the development of eWork and telework practices in employee surveys.

To select the indicators useful to describe remote working practices, it is firstly necessary to clarify the definition of telework intended to be used. On the basis of the STILE pilot activity, our definition of telework extends the concept to any occupation that uses telecommunication *links*, used either *systematically* or *occasionally* and entirely or partly conducted *outside the traditional workplace*. This means that telework can be performed at the worker's *home* (home based), from a *location belonging to a third party* (such as customer premises), from a *mobile station* (mobile telework) or from a combination of these places (*multilocational worker*).

To detect the quota of teleworkers, two main strategies are generally pursued. Firstly, an exact definition of telework can be supplied and the respondents are then asked whether they consider themselves to be teleworkers. Secondly, certain indicators can be pinpointed whose combination can supply a typology of the various forms of telework.

In our work we didn't want to use a rigid definition of telework because there is no general agreement on it and because new forms of work at a distance can emerge in an ever-evolving organisation practice. Moreover we think that it is useful to give data users the freedom to use more or less rigid definitions of telework to quantify the phenomenon.

The multidimensionality of the phenomenon clashes with the need for 'parsimony', typical or vast statistical inquiries like European surveys on the labour force. Given that there might only be very few questions added to the existing questionnaires, the partners' decision is that the output of the workpackage will be a list of indicators - *core indicators* (place of work, use of technology and duration of telework), essential to detect teleworkers, and *additional indicators*, useful to describe additional characteristics of telework.

These indicators have been operationalised in a module of survey questions. The STILE consortium pilot tested these questions to assess their usability, validity and reliability to measure telework. The pilot testing of the telework questions was carried out by compiling the questionnaire module with a selected number of core questions from the Labour Force Survey (LFS). This survey was selected as the most appropriate carrier for the test of the STILE telework module because it is the most important European survey on the labour force. It includes questions on the core characteristics of the respondent (age, gender, number of children, etc.) and on the core characteristics of the main and second job (employment status, working hours, permanency of contract, job, sector, etc.).

Pilot testing results

The pilot testing allowed the feasibility of the telework questions proposed for the workpackage 5 to be analysed, and three groups of questions to be detected. First of all there are the *telework questions*, namely the questions essential to pinpoint and characterise teleworkers. 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. For the analysis of the testing results three questions were central. They are summarised below.

- 1) Are the questions clear, complete and relevant?
- 2) Does the module work?
- 3) What opportunities do the combinations with other variables offer?

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 module (cf. infra).

Telework questions

Core module

Through our work and the analysis of the LFS conducted in workpackage 2 of the STILE project (see STILE report 'The missing e. The use of national elements of the LFS for eWork analysis') we had ascertained that the following telework indicators and questions are useful to detect and characterise teleworkers.

Indicators useful to pinpoint teleworkers are:

- a) place of work (see annex 1: eWork questions, question b);
- b) time spent working at a distance (see annex 1: eWork questions, question c);
- c) use of ICT (see annex 1: eWork questions, question b3).

These indicators were at the basis of the core questions in the test surveys. The experiences have taught us that it is better to deduce various telework definitions on the basis of three indicators. This method is better than the inductive method in which respondents are asked whether they are a teleworker in one question only (referring to a specific definition).

The Hungarian experience¹ demonstrated that the method of selecting the respondents with a specific question on the eventual practice of telework, determines an effect of 'social desirability' inducing some respondents to claim to be teleworkers even if they aren't. There may also be the opposite effect because some people/countries don't see it as desirable. A lot of male, professional multilocational workers do not see themselves as teleworking, which they confuse with poorly paid homeworking arrangements mainly taken up by women.

Despite the general positive assessment of the module, the test has revealed some difficulties with the composition of the module, the wordings and the order of the questions. The problems experienced and the proposed changes to the module are presented in the following paragraphs.

Place of work

The experience of the pilot test has highlighted that, in order to obtain the least number of missing answers, it is more useful to mention the non-traditional workplaces first of all (*home, on the move*) so as to attract the respondent's attention. What's more, the interviews demonstrated that the answer choices are not exhaustive so it is always necessary to include 'other' as a possible answer. Including 'other' also means that additional choices can be added to the list in future surveys, as they become important, without losing the continuity of a survey series. In any case, to simplify the data processing it might be useful to divide the other answer categories into two groups: the other non-traditional workplaces, such as hotels or conferences, compatible with telework, and the other traditional workplaces (such as employer's office).

¹ The council regulation code of the LFS carried out in Hungary is 1575/2000.

All those that choose only replies related to ‘one or more locations belonging to employer’ and ‘other traditional workplaces’ are to be considered *traditional workers*, whereas all the others, who can be considered *eWorkers* or *teleworkers* can be administered the successive questions.

Time spent at a distance

To obtain information on the intensity of telework and to distinguish *regular* and *occasional teleworkers*, it is necessary to estimate the hours spent working at a distance during the last four weeks. These data can be crosstabulated with the total work time ascertained through the general questions in the survey and thus allow a distinction to be drawn between regular and occasional teleworkers.

In the typology proposed, occasional teleworkers were those that declared having worked at a distance for less than 20% of their entire working time. Nevertheless, other types of classification are possible. Time spent at the remote location is useful information, but perhaps not specific enough to give a real sense of telework intensity. In the STILE pilot, information on the total duration of work at a distance was found to be more accurate than the estimate of the frequency of the online connection. Even though it did provide more precise information on the telework modalities, it risks being too complex for this type of inquiry.

Use of ICT

The original filter question on the different ICT tools that are used when the respondent works at a distance (see annex 1: eWork questions, question b3), is too complex. It needs a simplification. For the analysis of the pilot data the question on the intensity of computer usage (see annex 1: other questions, question c3) was used as a filter. Discussions on the shortcomings of the module however have led to a new proposal on question on ICT usage (cf. adapted module).

These discussions revealed that the original module did not allow to gain information on the ICT usage for work in general. A question on the usage of a PC for work needs to be asked to all respondents. The discussions on the test results also identified certain interesting questions on the usage of ICT that are not included in the STILE module. The UK and Ireland have for instance positive experiences with the question from the UK LFS on the importance of the ICT link to make work at a distance possible. It was concluded that the question: ‘Would it be possible to work in this way without using the technology?’, will be useful in a telework module. Another interesting question that may be interesting in the module is the one that tries to find out how the results of the respondent’s work at a distance are transferred (see annex 1: additional questions, question b2).

Adapted module

The remarks on the original module have been translated into the following proposal for the telework module. This module must be able to estimate the number of teleworkers for each country and to sketch a picture of the teleworkers based on their telework modalities.

The essential questions that could be used are the following:

- a1. **Do you use a computer for your work?** (yes/no question) [FILTER QUESTION]
- a2. **Do you use the internet or email for your main job?** (yes/no question)
- b. **In the last four weeks (reference week and 3 weeks before) have you carried out work at any of the following places?** (*multiple answer*)
 1. In your own home
 2. At locations belonging to a third party (*as customer premises*)

4. In more than one location belonging to customers or clients
 5. Other places different from traditional workplaces (*hotels, conferences, etc.*)
(*specify: _____*)
 6. In more than one location belonging to your employer
[no teleworker - stop questionnaire]
 7. At just one location belonging to your employer
[no teleworker - stop questionnaire]
 8. Other traditional workplaces (*specify: _____*)
- c. **In the last 4 weeks (reference week and 3 weeks before), approximately how many hours a week, on average, did you spend working at a distance (from your employers' location)?**
- d. **Would it be possible to work in this way without the technology? (yes/no question)**

The only thorny question concerns the order of the A and B question. We can list the pros and cons for taking the ICT indicator as the first indicator. However, we think it is important to mention that the definitive order of the question depends on the whole context of the questionnaire (questions, target group, research question, etc.) to which the module is attached.

Pros (within the framework of the LFS)

- 1) The question is asked to all and produces an interesting information about the entire population.
- 2) An easy question as first filter. It reduces the interviewer burden as the more complicated place question is not to be asked to all respondents.
- 3) The logic of the basic questionnaire is less disturbed.

Cons

- 1) It is not clear whether the respondent uses the technologies to work at a distance.
- 2) As the usage of a computer for work is high, the filtering power is rather low (but not nihil).² In other words, the risk is high that nearly all distant working people are conceived as teleworkers.

² The question should be conceived as a filter of respondents rather than a filter of teleworkers.

Additional questions

The telework questions (five questions) are related to the essential dimensions of the phenomenon and measure the *place* where the worker performs his/her working activity, the degree of importance of information use and telematic *technology*, and the *quota of working time* spent on telework.

In addition to these three dimensions, we selected several indicators on the 'work environment' of telework in order to describe more in detail the characteristics of telework.

The questions inserted in the pilot inquiry which provided the most interesting results and could thus be included in an ad hoc module on telework are as follows:

- intensity of work at a distance;
- means used to transfer result of work (personally, post courier, fax, telephone, email, internet, software for remote collaboration, other);
- equipment used when working at a distance (computer, email, telephone, fax, internet, intranet, software for remote collaboration, other);
- who initiated the arrangement (employer, worker, both);
- whether formal or informal arrangement;
- reversibility (to have the choice of ceasing to telework);
- assessment of changes in work pressure after starting to telework;
- motivation for teleworking (to finish or catch up with work; to avoid interruption; because of a bad working environment or bad working relationships; required by job or employer; to co-ordinate your work schedule with personal or family needs; experimentation; to reduce commuting time or expenses; health reasons; for greater autonomy or independence).

The following table gives an overview of the core and the additional indicators. Given the different working conditions, there are some differences between the self-employed and employees. In fact, many of the questions that are comprehensible for employees are meaningless for the self-employed, as for example the agreement on telework or its level of formality. To ease the administration of the questionnaire, two separate questionnaires had to be formulated although the data were inserted in the same database.

Table 1. Core and additional indicators about telework

Indicators	Respondents
<i>Telework indicators</i>	
Computer usage for main job	All people [filter]
Internet or email usage for main job	All people
Places worked in reference week	All people
Proportion of hours a week spent on distance work	All people
Importance of technology	All people
<i>Additional indicators</i>	
Intensity of connection with the company or the customer	All people
Methods to transfer work results	All people
Equipment used working at a distance	
Initiator of the arrangement for working at a distance	Only employees
Level of formality of arrangement	Only employees
Reversibility of the arrangement	Only employees
Main reason for working at a distance	All people
Wish to continue working at a distance	All people
Experienced impact on work pressure	All people

Other questions

During the pilot inquiry some questions were used which produced interesting results and could be useful for any specific analyses on telework. Some of these questions were tested by all the partners, others only in some countries. These questions are listed below:

- a. **If you work from home, in which room do you work? (if b=1)**
 - Study
 - Living room
 - Bedroom
 - Kitchen
 - Other (*specify:* _____)

- b. **Who provides the ICT equipment used when working at a distance? [only employees]**
 - Employer
 - Respondent
 - Both
 - Third party (*specify:* _____)

- c. **When you work at a distance from your employer's location, what proportion of that time do you use a PC?**
 _____ % of the time worked during an average day
 OR
 _____ fraction of the time worked during an average day

- d. **Have you used the internet for the following work-related activities?**
 - Looking for a job/sending job applications
 - Finding information relating to your work/business
 - Sending work to the workplace
 - Accessing files on the employer's server
 - Communication (including email)
 - Other work-related activities (*specify:* _____)

Detecting the typology of teleworker

As already mentioned, it is not possible to differentiate the teleworkers through a single question, given the multidimensional nature of the phenomenon. It is thus necessary to combine various questions.

Having said this, it would be possible from the juxtaposition of location, technology and intensity to derive many different definitions of 'teleworkers', 'eWorkers', 'mobile workers', 'multilocal workers' or 'occasional teleworkers' that would allow researchers to address quite different policy issues.

Steps towards a typology based on the STILE core indicators

Using the questions proposed in the adapted module (chapter 3), the following processing was used to construct the typology:

- 1) *analysis of the combination of work locations*: this operation is aimed at constructing a typology of teleworker based on the work location(s) the respondent worked from in the reference period. In this question it is possible to supply more than one answer. In order to ensure sufficient cell sizes for any analysis, there is a need to aggregate some of the locations;
- 2) *by combining the answers* it is possible to detect four types of workers: the *stationary workers* who work only at their employer's location, the *mobile workers* who work exclusively 'on the move', the workers that work exclusively from *remote stations* (either from home), the *multilocal workers* that work both from mobile, or remote stations, or from their employer's location (see Tables 2 and 3);
- 3) *labelling workers* who declared working only in traditional locations as 'non-teleworkers' (CATI programme can do this automatically);
- 4) *calculation of the percentage of hours worked at a distance* out of the total hours worked in the reference week and the aggregation of the variables in two groups, from 100% to 20% and from 20% to 0%;
- 5) distinction between occasional and stable types of teleworkers (see Table 4).

Table 2. Combination of workplaces; results of pilot

	Belgium		Italy		UK		Hungary	
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Traditional workers	58	33.0	94	47.0	39	19.3	10	7.1
Mobile no teleworkers	-	-	6	3.0	-	-	-	-
Mobile workers	5	2.8	0	0.0	3	1.5	4	2.9
Telehomeworkers	18	10.2	26	13.0	21	10.4	21	15.0
Mobile and remote workers	28	15.9	20	10.0	19	9.4	17	12.1
Stationary and remote workers	26	14.8	48	24.0	16	7.9	57	40.7
Stationary and mobile workers	27	15.3	0	0.0	13	6.4	13	9.3
Stationary, remote and mobile workers	14	8.0	6	3.0	91	45.0	10	7.1
No answer	-	-	-	-	-	-	8	5.7
Total	176	100.0	200	100.0	202	100.0	140	100.0

Source: Data of STILE pilot study on telework, 2002, processed by IRES

Table 3. Combination of workplaces to obtain the STILE typology of workers

Typology	Possible answers	Kind of workers
Traditional workers (stationary workers)	'In more than one location belonging to your employer' <i>and/or</i> 'At just one location belonging to your employer' <i>and/or</i> 'Other traditional workplaces'	NON-TELEWORKERS
Mobile workers	'On the move (while travelling)' <i>and/or</i> 'At locations belonging to a third party'	MOBILE WORKERS
Telehomeworkers	'In your own home'	TELEHOMEWORKERS
Mobile and remote workers	'On the move' <i>and/or</i> 'At locations belonging to a third party' <i>AND</i> 'In your own home'	MULTI-LOCATIONAL WORKERS
Stationary and remote workers	'In more than one location belonging to your employer' <i>and/or</i> 'At just one location belonging to your employer' <i>and/or</i> 'Other traditional workplaces' <i>AND</i> 'In your own home'	
Stationary and mobile workers	'In more than one location belonging to your employer' <i>and/or</i> 'At just one location belonging to your employer' <i>and/or</i> 'Other traditional workplaces' <i>AND</i> 'On the move (while travelling)' <i>and/or</i> 'At locations belonging to a third party'	
Stationary, remote and mobile workers	'In more than one location belonging to your employer' <i>and/or</i> 'At just one location belonging to your employer' <i>and/or</i> 'Other traditional workplaces' <i>AND</i> 'In your own home' <i>AND</i> 'On the move (while travelling)' <i>and/or</i> 'At locations belonging to a third party'	

Table 4. Typology of individualised eWork

More than 20% of the time worked at a distance out of total time worked during reference week	Less than 20% of time worked at a distance out of total time worked during reference week
Telehomeworker Multilocal eWorker Mobile eWorker	Occasional telehomeworker Occasional multilocal eWorker Occasional mobile eWorker

Obviously this strategy is only one of the possible methods of classifying teleworkers: other combinations can be determined by modifying the aggregations of the variable obtained with the combination of the work locations or by modifying the threshold for the definition of occasional workers or by using the information on the technology used to further define the teleworkers. In the inquiry conducted (718 people interviewed) the distribution of the types is reported in Figure 1. The typology shown is one of many that can be applied to new forms of work. Our recommended strategy for collecting data in objective terms allows defining teleworkers in different ways that correspond to various policy questions, which could involve labour issues, transportation, diffusion of technology or others.

Other possible derived typologies

Table 5 illustrates how the counts of teleworkers varies depending on definitions of telework that can be derived from data such as that collected in the Quarterly National Household Survey of Ireland. The Irish survey uses the CLFS homework question 'Do you work from home?' with 'usually', 'sometimes' or 'never' as answering categories. Thus, transportation planners interested in work at home as a way to reduce commuting trips would limit the Irish total of 238,100 persons who *never* do any of their work at home to define teleworkers as the 170,000 who *usually* work at home. In their analysis planners might exclude the 68,100 individuals who 'sometimes' work there because their work at home has less impact on traffic reduction.

Further restrictions may be placed on what constitutes telework. Policymakers interested in the impact of ICT on employment would define teleworkers as those individuals who use a computer and telecommunications link or more narrowly, to those for whom the ICT link is essential. That reduces the 65,400 who have a link, to 40,800 who could not work at home without it. Clearly, if any of these or other definitions of teleworker had been used in the questionnaire, rather than at the point of analysis, it would preclude using the data so widely.

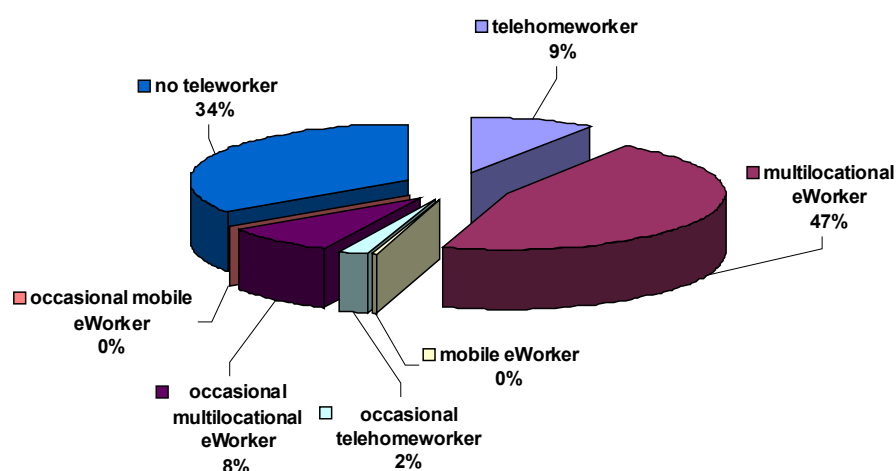
**Figure 1.** The STILE typology in the pilot (Belgium, Italy, UK and Hungary)

Table 5 also underscores that when reporting the number of teleworkers, it is essential to state the definition underlying the data. In the third column the percent of teleworkers ranges from 13.3% to 0.1% of the employed labour force, depending on how teleworkers are defined.

Table 5. Alternate derived definitions of telework

	Number	Percent of all in employment
Sample size	44,500	100.0
Persons in employment	1,795,000	100.0
1. An employed person who does any work at home	238,100 ⁽¹⁾	13.3
1a. An employee who does any work at home	66,500	3.7
1b. A self-employed person who does any work at home	159,900	8.9
2. An employed person who does any work at home using a computer with a telecommunications link	65,400	3.6 ⁽²⁾
3. An employed person who could not work at home without a computer and telecommunications link	40,800	2.3 ⁽³⁾
4. An employed person who works in multiple locations using home as a base	34,100	1.9
5. An employed person who works in multiple locations using home as a base and uses a computer and telecommunications link	5,700	0.3
6. An employed person who works in multiple locations using home as a base and could not work at home without the use of a computer and telecommunications link	2,500	0.1

⁽¹⁾ Includes persons who work at home assisting relatives.

⁽²⁾ 27.5% of persons who work at home.

⁽³⁾ 62.4% of those who work at home with computer and telephone.

Source: Irish Quarterly National Household Survey Q3 2002

Chapter
7

Suggestions for recommendations on the implementation strategy

The suggestions that are made here are based on the general experiences within the STILE project. We try to put forward some points of special interest for the inclusion of the eWork module to an existing survey.

Selection of the best carrier to piggyback the telework module

For the choice of the basic questionnaire, it is important to realise that the decision on the inclusion of a module is often a political decision. It depends on the general context of the questionnaire, socio-economic circumstances, interests of influential policymakers. This means that it is important to convince influential decision makers on the importance of the eWork module, which requires a profound knowledge of the objectives of the organisation concerned.

This is of special importance in the case of promoting an ad hoc module to the Labour Force Survey, as there is a huge concurrence on demands for including ad hoc modules. What is more the variance of influential policy interests is very large in the framework of the Labour Force Survey.

The table below gives an overview of surveys that may be useful for attaching the tested eWork module. Most of them collect information on the working situation of the respondent. Job characteristics such as the type of contract, permanency, job, sector, size of the organisation, working hours (contractual, some also usual), etc. are made an inventory of in these questionnaires. In addition to this the most important socio-demographic characteristics explored are: age, sex, number of children, educational level. In the pilot the informational value of cross tabulations between the core eWork indicators and these generic indicators has been illustrated.

The STILE research can be relevant to the questionnaires listed here, as a lot of them already have included a question on telework. They all use a direct question, using a rigid definition. In the STILE research the opportunities of a deduced definition based on three core indicators have been defended and illustrated. Therefore the module developed here can offer an added value to questionnaires that already include the issue of eWork.

Table 6.

Questionnaire	Scope	Sample	Description of relevant variables	Other specific characteristics
Internet statistieken Vlaanderen	Flanders	1,500 at random selected residential respondents	<ul style="list-style-type: none"> ▪ Working situation-job characteristics ▪ PC usage applications ▪ PC knowledge - courses ▪ Internet access ▪ Internet usage applications ▪ Telework (1 question, asking whether one teleworks or not) 	<ul style="list-style-type: none"> ▪ 3 surveys between 1999 and 2002 ▪ CATI
European survey on working conditions	EU member states	Random walk selection of a sample of the active population 1,500 per country	<ul style="list-style-type: none"> ▪ Job characteristics (status, contract, sector, job, company size, etc.) ▪ Physical environment of work ▪ Working times (obj. & subj.) ▪ Control of work ▪ Autonomy, functional and social contact opportunities, etc. (obj. & subj.) ▪ Training ▪ Health and safety risks (obj. & subj.) 	<ul style="list-style-type: none"> ▪ Carried out every 5 years ▪ Face to face structured interviews
European Community Household Survey	EU member states	EU member states +16 years (individuals and households)	<ul style="list-style-type: none"> ▪ Housing features (rooms, problems experienced, etc.) ▪ Job characteristics (job, sector, working hours, part-time full-time, etc.) ▪ Income ▪ Union membership <p>Since 2002</p> <ul style="list-style-type: none"> ▪ Computer usage (including whether teleworker or not) ▪ Activities with computer for work purposes ▪ Activities with computer for private purposes ▪ Reason for using a computer 	<ul style="list-style-type: none"> ▪ Panel survey ▪ Since 2002 ICT questions are included ▪ Telework question asks whether teleworker or not ▪ CAPI
Eurobarometer	EU member states Candidate states	1,000 per country multi-stage sampling	<ul style="list-style-type: none"> ▪ Opinion questions ▪ 1 on information society and internet <ul style="list-style-type: none"> ▪ Internet usage (mainly private usage) 	<ul style="list-style-type: none"> ▪ Twice a year the standard Eurobarometer ▪ Trend measurement by regular repeating of certain questions ▪ Flash barometers (on specific issues, specific target groups) ▪ Face to face interviews

Table 6.

Questionnaire	Scope	Sample	Description of relevant variables	Other specific characteristics
Household survey on ICT usage	EU member states	At least 4,000 per country	<ul style="list-style-type: none"> ▪ Job characteristics ▪ ICT at home ▪ Internet access of household members ▪ Computer usage training ▪ Internet usage for work-private ▪ Internet usage for work at a distance from the employer's premises ▪ eCommerce ▪ Household characteristics 	<ul style="list-style-type: none"> ▪ SIBIS group has improved some questions and has already attached questions on telehomework and mobile work (using the definition in the question and then asking whether one is a telehomeworker-mobile worker) ▪ CATI
Population and Housing Census	EU member states	Total active population	<ul style="list-style-type: none"> ▪ Job characteristics (job, sector, educational level, company size) ▪ Distance to work ▪ Different places of work (Belgium) ▪ Working times ▪ Household composition ▪ Responsibility for children-other 	<ul style="list-style-type: none"> ▪ Postal survey ▪ 1 household part, one individual part
E-living survey	Norway, UK, Germany, Italy, Bulgaria, Israel	1,500 per country +16 years	<ul style="list-style-type: none"> ▪ Personal data (sex, age, etc.) ▪ Job characteristics (job, sector, educational level, company size) ▪ Leisure-time spending ▪ Computer usage at home-work ▪ Usage of internet and email at home-else ▪ Knowledge of computer ▪ Places of work ▪ Distance to work ▪ Remuneration ▪ Qualification ▪ Work at home (including taking work home) ▪ Intensity of computer usage and internet for work at home ▪ Importance of computer skills 	<ul style="list-style-type: none"> ▪ Panel survey ▪ Telework questions are included in this questionnaire ▪ CATI (CAPI in Bulgaria)

Table 6.

Questionnaire	Scope	Sample	Description of relevant variables	Other specific characteristics
Households, work and flexibility survey	UK, NL, SE, SI, CZ, HU, BG, RO	Random selection	<ul style="list-style-type: none">▪ Economic activity▪ Workplaces▪ Working conditions▪ Reasons for specific working conditions▪ Satisfaction with arrangements and wish to change them▪ Household composition▪ Responsibility for different domestic tasks▪ Voluntary work▪ Household decision making▪ Satisfaction with economic activities and impact on family life▪ Work and family tensions▪ Eagerness to move, change jobs, etc.▪ Economic resources of household	<ul style="list-style-type: none">▪ In some countries face to face, in other telephonic interviews (NL, SE)▪ Carried out in 2001

Practical guidelines

Some practical points need special attention when including an ad hoc module to an existing questionnaire. The experience within the STILE pilot has taught that a module should be composed of:

- a limited list of core indicators that can be translated into simple questions;
- a list of relevant additional indicators that allows the user to choose certain indicators that may be of interest within the specific context of the survey;
- the list of answering categories should keep in mind the consequences for the resulting number of variables and the related data processing burden;
- the specific wording of the questions is to be adapted to the general character of the survey concerned;
- the routing of questions depends on the objectives, the target group, the composition, etc. of the basic questionnaire. Specific attention should be paid to the impact of the order of questions on the interviewer burden and on the kind of respondents that should answer a specific question;
- the inclusion of the module should not change the authorised questionnaire.

Proposal of ad hoc module for eWork

a) eWork questions

a1) **Do you use a computer for your work?**

1. Yes
2. No

[FILTER QUESTION: stop questionnaire]

a2) **Do you use the internet or email for your main job?**

1. Yes
2. No

a3) **In the last four weeks (reference week and three weeks before) have you carried out work at any of the following places? (multiple answer)**

1. In your own home
2. At locations belonging to a third party (*as customer premises*)
3. On the move (*while travelling*)
4. In more than one location belonging to customers or clients
5. Other places different from traditional workplaces (*hotels, conferences, etc.*) (*specify: _____*)
6. In more than one location belonging to your employer [no teleworker - stop questionnaire]
7. At just one location belonging to your employer [no teleworker - stop questionnaire]
8. Other traditional workplaces (*specify: _____*) [no teleworker - stop questionnaire]

a4) **In the last four weeks (reference weeks and three weeks before), approximately how many hours a week, on average, did you spend working at a distance (from your employers' location)³ [or: at locations selected in question a3]?**

_____ (Proportion of hours a week spent on distance work can be calculated using total hours worked in week)

a5) **Would it be possible to work in this way without the technology?**

1. Yes
2. No

³ In self-employed questionnaires it is better to omit 'from your employers' location'; so in following questions the expression is bracketed.

b) Additional questions

b1) **When you work at a distance (from your employer's location), how often are you connected to your company or customer?**

	<i>Phone connection</i>	<i>Data connection</i>
1. The whole working day	<input type="checkbox"/> 1	<input type="checkbox"/> 1
2. Several times a day	<input type="checkbox"/> 2	<input type="checkbox"/> 2
3. Once a day	<input type="checkbox"/> 3	<input type="checkbox"/> 3
4. At least once a week	<input type="checkbox"/> 4	<input type="checkbox"/> 4
5. Less than once a week (occasionally)	<input type="checkbox"/> 5	<input type="checkbox"/> 5
6. Never	<input type="checkbox"/> 6	<input type="checkbox"/> 6

b2) **When you work at a distance (from employers' location), do you transfer work results in the following ways:** [multiple responses allowed]

1. personally
2. post courier
3. fax
4. telephone
5. email
6. internet
7. software for remote collaboration (groupware)
8. other (*specify:* _____)

b3) **Which of the following list of equipment do you use when you work at a distance (from your employer's location)?** (*more answers are possible*)

1. Computer (desktop or laptop)
2. Email
3. Telephone
4. Fax
5. Internet
6. Intranet
7. Software for remote collaboration (groupware)
8. Other (*specify:* _____)

b4) **Who initiated the arrangement for working at a distance?** [only employees]

1. Employer
2. Yourself
3. There is no arrangement
4. Other (*specify:* _____)

b5) **Is the arrangement to work at a distance from your employer's location a formal or an informal initiative?** [only employees]

1. Formal: there is a written agreement (*go to question b5.1*)
2. Informal
3. DK

b5.1) **For this agreement can you stop working at a distance?** [only employee] (*only if respondent answers 1 to question b5*)

1. Yes, if I want
2. Yes, but it depends on my employer
3. Yes, but only at the end of the agreement
4. No
5. Other (*specify:* _____)

- b6) **What is the main reason for working at a distance (from your employer's location)?** (*only one answer*)
1. To finish or catch up with work
 2. To avoid interruption
 3. Because of a bad working environment or bad working relationships
 4. Required by job or employer
 5. To co-ordinate your work schedule with personal or family needs
 6. Experimentation
 7. To reduce commuting time or expense
 8. Health reasons (your own physical condition)
 9. For greater autonomy or independence
 10. Some other reason (*please specify: _____*)
- b7) **Do you want to continue working at a distance (from your employer's location)?**
1. Yes
 2. No
- b8) **Since you began working at a distance (from your employer's location), has your level of work pressure changed?**
1. More work pressure
 2. Less work pressure
 3. As much work pressure as before
 4. Don't know
 5. I can't judge because I don't have any other experience to draw on

c) Other questions

- c1) **If you work from home, in which room do you work?** (*only if respondent chooses answer 1 to a3 question*)
1. Study
 2. Living room
 3. Bedroom
 4. Kitchen
 5. Other (*specify: _____*)
- c2) **Who provides ICT equipment used working at distance?** [only employee]
1. Employer
 2. Respondent
 3. Both
 4. Third party (*specify: _____*)
- c3) **When you work at a distance (from your employer's location), what proportion of that time do you use a PC?**
- _____ % of the time worked during an average day
- OR
- _____ fraction of the time worked during an average day
- c4) **Have you used the internet for the following work-related activities?**
- Looking for a job/sending job applications
 - Finding information relating to your work/business
 - Sending work to the work place
 - Accessing files on the employer's server
 - Communication (including email)
 - Other work-related activities (*specify: _____*)

c5) **How is your work controlled when you work at a distance from your employer's location?** [only employees] (*maximum 2 answers*)

Supervision:

- Direct supervision
- Automatic recording of performance

Non direct supervision but:

- Delivery of output within specified deadlines
- Definition of individual goals
- Definition of team goals
- Other (*please specify:* _____)