



## Report Usergroup 1: Telework indicators

KATHOLIEKE  
UNIVERSITEIT  
LEUVEN

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AANWEZIG Paul Berckmans, Bernard Conter, Marianne de Troyer, Alain Isaac, Gérard Valenduc, Myriam van Weddingen, Willy Verdonck, Peter Vanderhallen, Roel Verlinden, An Bollen (verslag)

VERONTSCHULDIGD Monique Ramioul

### Agenda:

1. Introduction of the participants
2. General presentation of the STILE-project
3. General situating of the (belgian) LFS (Labour Force Survey)
4. Presentation of the conceptual framework and the proposed list of indicators
5. Discussion on indicators
6. Further proceedings

### 1. General presentation of the conceptual framework and the proposed list of indicators

Before starting the discussion on the proposed list of indicators, we gave a short presentation of the conceptual framework and the proposed list of indicators. An important remark concerning the proposed list of indicators was that a translation of these indicators results in a large list of questions. Attaching such a large list of questions as a module to an existing questionnaire is very unrealistic.

Therefore, it is very important to agree on the objectives of the development of telework indicators, before discussing the relevance of the proposed variables. Within the usergroup we agreed that it should be the mission of our work to develop a broad list of indicators which can be useful for different objectives. Based on the results of the pilot test it should be possible for several interested scientists, statistics and policy makers to compose a module or a questionnaire in function of a specific telework related questions. Therefore the major objective of the project should be to test some scientifically sound indicators on their feasibility and their relevance.

The assessment of such a broad list of telework related indicators, enables us to formulate some recommendations with respect to the most essential characteristics of telework, thus allowing us to lay the foundations for further research on telework. In order to be able to formulate some

useful recommendations, the assessment should focus on some general and basic questions concerning telework. The composition of the proposed list of indicators gives an initial impetus to such an assessment. The indicators on the filter for instance can be very useful to count teleworkers or to distinguish teleworkers from 'occasional workers'. The assessment of these indicators should therefore focus on the feasibility of these indicators to count the number of teleworkers. The indicators on the quality of work, on the other hand, should be assessed on their relevance and their feasibility to measure for instance the impact of telework on the employment conditions.

Because the list of indicators is founded on a scientifically sound and multidisciplinary conceptual framework, we can enlarge the discussion on telework and emphasise the importance of some telework related aspects. We are challenged to find and assess some indicators which are less self-evident and which are unusual within the current research on telework. Indicators on the functionality of the ICT-link and indicators on the autonomy of teleworkers for instance are rare in telework related research. By taking up this kind of indicators we can inspire some innovative research questions and we can persuade statistical bodies of the complexity and the variety of the concept 'telework'.

### 3. Discussion on indicators

The report on the discussion on indicators firstly describes the propositions and the questions proposed to the group. After that it gives a summary of the comments and the conclusions of the discussion.

#### 3.1 Filter

**Proposition:** Teleworkers are only those people (employees or self employed) who regularly work at home, at a telecentre or a satellite office<sup>1</sup> or at mobile places, using an ICT-link to bridge the distance between their employer or customer.

**Question:** Most telework related researches define telework as a work form in which the worker spends at least a part of his working time at distance from his employer – customer, using an ICT-link to bridge that distance. This definition is often operationalised as workers who work at least one full day

- At home
- In a telecentre – satellite office
- At mobile workplaces

Other definitions of telework use the distance to the 'traditional workplace' as a discriminating variable. If we consider the opportunities ICT have shaped concerning the 'traditional workplace', we have to conclude that ICT have not only enabled companies to decentralise activities and spread them geographically. ICT have also made it possible to centralise activities that have been geographically spread before. Thanks to ICT, customer services can for instance be carried out at distance from a client, centralised in a call centre whether or not at the employers premises. Another example of centralisation of traditionally decentralised services is the control, maintenance and sometimes even the reparation of equipment at distance.

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<sup>1</sup> Telecentres and satellite offices are both set up to bring the work closer to the worker. Both are collective offices in the neighbourhood of the worker. In contrast to a telecentre, a satellite office is shared by more employers. This means that in a satellite office one finds workers of different employers, in a telecentre only workers of one employer are represented.

Should these new forms of work at distance also be considered as forms of telework? If yes, which are the consequences for the filter? Are there indicators that have to be further refined?

- Distance
- Time
- ICT-link
- Relation to the customer – employer

Research (ECaTT) has shown that the proportion of working people, who spend a certain amount of their working time at home, in a telecentre or in a satellite office, is low. These teleworkers work maximum 1-1,5 day a week at distance from their normal place of work. The proportion of teleworkers spending at least 90% of their working time at distance is very low.

Next to these forms of telework there are some other forms of work at distance. Therefore the concept of telework has to be broadened. One example of more frequently found forms of distance work is the work at different places: some hours at home, some hours at the office, some hours at the customer's premises. Another important example is that of people always working at the client's premises, preparing and administrating their work at home. With respect to the new forms of work it should also be noticed that a lot of these workers have a juridical statute which can be situated between that of an employee and a self-employed, such as free lancers or workers which are self-employed because their employer has decided to outsource their job.

Therefore, if we want to get a broad scope on the telework reality, we can not start from a rigid definition. We have to base ourselves on the telework reality, in order to deduce from that reality a typology of telework and to gain insights into the conditions in which these forms of telework take place.

Such a deductive analysis has to start from a set of parameters, allowing us to distinguish teleworkers (in a broad sense) from non-teleworkers. The indicators proposed in the note, namely 1) distance to the employer – customer 2) a certain amount of the working time spent at distance and 3) the use of an ICT-link to bridge the distance are too general. A truck driver who spends whole days at distance from his employer and who regularly takes contact via an ICT-link with the dispatching department, scores positive on these 3 variables. However, he can not be considered as a teleworker, as the ICT-link has nothing changed in the essence of his job. The same goes for a telephone installer who can do some important administrations via the laptop now.

In this discussion it becomes clear that it is important to gain insights into the frequency with which one connects with the employer – customer via the ICT-link, and how long one is connected (as one is continuously connected by a leased line for instance, it is necessary to define 'connecting' here as 'effectively interchanging information'). Next to that it is important to get insight into the role of the ICT-link in enabling working from a distance. Is the ICT-link a prerequisite in enabling working at distance (*own interpretation*; for an employee survey this means that they should be asked how necessary the ICT-link is to carry out the work at distance, if the ICT-link makes the difference. That way it is also possible to distinguish telehomeworkers from workers who take work home and even with homeworkers).

As a conclusion of this discussion, we can say that it is important to get insight into the sector, the juridical statute and into the necessity of the ICT-link in order to be able to distinguish teleworkers from the workers who traditionally work from a distance and who are now just supported by an ICT-link. Translated to the list of indicators this means that the filter indicators have to be able to separate those people who work at least 20% of their working *time* at *distance* from their employer, customer or equipment which they have to reach, using an *ICT-link to bridge that distance* (with a minimal frequency a day) *as a necessary prerequisite* to carry out the work they do from a distance (*own interpretation*).

### 3.2 ICT-link

**Proposition:** Insights into the nature, the intensity of use and the functionality of the ICT-link and the persons with whom one communicates via this link, are the important and sufficient conditions to define the importance of ICT in enabling telework.

**Question:** In the note we propose some indicators to explore the telework functions further. One of the indicators concerns the ICT-link, more specifically the nature, the intensity of the use, the direction of the use and the functionality of the use. The questions we ask ourselves are:

- 'Which of the proposed indicators are relevant and which are less relevant? For the relevant indicators: are there some categories lacking or are there some unnecessary categories?'
- 'Is it, within a telework module, sufficient to explore the use of the ICT-link or should there be also some attention for the role of ICT within the function in general?'

In the discussion concerning the general demarcation of teleworkers, it has already become clear that it is important to gain insights into the intensity of the use and into the necessity of the ICT-link for working at distance. If we want to gain deeper insights into the telework activities and if we want to be able to distinguish different forms of telework, it is also important to know for which tasks-transactions the ICT-link is used ultimately (functionality)<sup>2</sup>.

The nature of the ICT-link is also important to the further exploration of the different telework activities. Here, the difference should be made between *hardware* and *applications*. Hardware refers to the technology used e.g. telephone (fixed: traditional one-line-ADSL-ISDN or mobile), Internet connections, network connection, etc. Applications on these technologies can vary from a simple e-mail at one extreme to business transactions at the other extreme. This technical background is not that important viewed apart. It is important because the nature of the application has an impact on *the human aspect of communication*. Therefore, the opportunities to communicate in a direct and human way, informal and formal, with colleagues or partners have to be investigated too (see further under quality of work).

Within a telework module it is preferable to restrict the ICT-related questions to the exploration of the role of the ICT-link in enabling working at distance. The exploration of the role of ICT for the job in general is another research question that should lead us too far here.

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<sup>2</sup> We refer to this indicator because the way the ICT-link is used, its role it takes up in the working at distance, is related to the impact telework has on the nature of the work. The work of a researcher who prepares a seminar at home, and sends the results to his project manager by e-mail, for instance, has hardly changed. The work of a technician who has to control the telephone network from a computer at the office and who can solve a lot of problems at distance by logging in to the modem of the equipment at distance, however, has radically changed since the introduction of working at distance.

Here it becomes clear that this indicator can also offer a good basis for new problem definitions concerning telework and inspire new research issues. Insights into the functionality can for instance inspire questions relating the impact of telework on skills requirements. It can be assumed that the skills requirements for the above mentioned technician have changed radically. But also for research questions in the interest of employers, this indicator is very important. The investments in ICT, training and the management of telework will be to a large extent dependent on the functionality of the ICT-link. For the researcher it is sufficient to invest in a modem or in a connection to the internal network. For the technician investments are more complex, the employees have to be trained and the management of these functions returns into supervision. (The examples here are very extreme, but they are presented here as a demonstration of the importance of the indicator)

### 3.3 Further exploration of the telework activities

**Proposition:** Within the section of indicators for further exploration of telework, some important variables are overlooked.

**Question:** The telework specific indicators we propose in the note are directed to a specification of the time, the place, the use of the ICT-link and some important task characteristics. Are there some indicators which can offer a surplus value to the further exploration of the circumstances in which telework is carried out?

The proposed variables are relevant. Because telework is a work form that can be a valuable contribution to the integration of handicapped people on the labour market, it is useful to insert also an indicator on this aspect. This without elaborating on the subject.

### 3.4 Quality of work

**Proposition:** The examination of the impact of telework on the 4 dimensions of quality of work extends the objectives of a telework module.

**Question:** In our note, we proposed some indicators on the 4 dimensions of quality of work, as we suppose that telework has an impact on these labour-related aspects.

We stated that the evaluation of these indicators could be useful not only for telework related research, but also for research on the quality of labour as such. We can play along with the current European priority to develop some indicators on the quality of work in general, by widening the discussion on relevant indicators. Since the most fundamental critics on the quality of work indicators proposed by the European Union concern a lack of scientific basis and a lack of multidisciplinary, we can give a broader dimension to the discussion. After all, the indicators we proposed are based on a scientifically sound and multidisciplinary framework.

If we want to pursue that goal, this has some implications on the quality of work indicators within the telework module. These will have to stay relevant within the framework of telework. Nevertheless, they should be asked to all respondents and should therefore be approached in a more general way.

Therefore the question we should ask ourselves in the first place is:

- Is it, within the framework of a telework module relevant to take up some indicators on the quality of work? If yes: which aspects are important, which are less important?

Within the framework of telework it is important to be able to check the impact of telework on quality of work. A comparison between teleworkers and non-teleworkers is a good basis to make a causal connection between telework and quality of labour. The ideal model for comparison should be the comparison between teleworkers and non-teleworkers in comparable jobs. There are some difficulties with this model for comparison. Firstly it is difficult to find comparable jobs. Secondly the representativity of this exercise is threaded by the fact that there are more non-teleworkers than teleworkers, which should lead to a comparison between a very small group with a very large group.

Another possibility to compare non-teleworkers with teleworkers, is to make a comparison between the results of the telework module and those of a survey focused on quality of work in general. This requires that the questions/indicators in the telework module are (more or less) the same as the questions in the general questionnaire.

However, this would mean a limitation for a module that is directed to some telework specific indicators, as there are some quality of work aspects which are very important in relation to telework, but which do not appear in surveys on quality of work in general. Important aspects within the framework of telework are for instance: technological equipment at home, opportunities to human communication, participation in formal / informal consultation, combination work-family. Other aspects which should be represented within a telework module are: flexibility, teamwork, autonomy and competence, as it is often stated that ICT can encourage these aspects of work.

The choice to take up these aspects in the telework module fits best with the objectives of a telework module. First of all, it offers the opportunity to evaluate the indicators on their feasibility. This evaluation can be a good basis for instance for further research on the impact of telework on the quality of work. Secondly, the evaluation of these indicators on their feasibility can broaden the discussion on general indicators on quality of work. This is possible because we propose indicators that are deduced from a scientifically and multidisciplinary framework.

### 3.5 Task characteristics

**Proposition:** The examination of the task- and function characteristics is too elaborated.

**Question:** For the further examination of the telework functions, we propose to take into account the kind of function, the specific tasks carried out at distance, the complexity of the functions and the way the tasks are controlled and supervised.

Question: Which of these indicators are:

- Relevant - less relevant?
- Too elaborated – too restricted?
- Which indicators are lacking?

The further analysis of the function and the task characteristics as such, is relevant. However there are two problems concerning the proposed indicators. Firstly, the indicators concerning the complexity of tasks are considered less relevant. Secondly, there is the problem of reliability of some indicators. It is for instance not that evident to get a reliable answer of working people on questions concerning the routine and the skills level of their function. Neither is it evident to obtain information on the control and supervision of work in an employee survey. The indicators that are proposed in the note are valuable to examine the way the work is controlled and supervised. However, it should be noticed here explicitly that these indicators can be used only to describe (not explain) the circumstances in which telework is carried out.<sup>3</sup>

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<sup>3</sup> As the LFS is a household survey, these indicators can be difficult to take up in that questionnaire.

### 3. Further proceedings

Research step	Period
<ul style="list-style-type: none"> <li>▪ Collecting proposals for indicators</li> </ul>	15 <sup>th</sup> February 2002
<ul style="list-style-type: none"> <li>▪ Common list on indicators</li> </ul>	28 <sup>th</sup> Februari 2002
<ul style="list-style-type: none"> <li>▪ Translation of indicators into questions</li> </ul>	March – April 2002
<ul style="list-style-type: none"> <li>▪ <b>Discussion in 2<sup>nd</sup> national usergroup</b></li> </ul>	April 2002
<ul style="list-style-type: none"> <li>▪ Assessment of indicators and national questionnaires in 1<sup>st</sup> European Usergroup</li> </ul>	Arbeidsmarktstatistiekdag Gent (Steunpunt WAV): 29 <sup>th</sup> May 2002
<ul style="list-style-type: none"> <li>▪ National pilot of the module</li> </ul>	April 2002-July 2002
<ul style="list-style-type: none"> <li>▪ Analysis of national data <b>Assessment in 3<sup>th</sup> national usergroup</b></li> </ul>	August 2002- September 2002
<ul style="list-style-type: none"> <li>▪ National reports on the feasibility of the module OUTPUT: Collection of national reports</li> </ul>	30 <sup>th</sup> September 2002
Assessment of the module at European level <b>Discussion in 4<sup>th</sup> national usergroup</b> OUTPUT: Strategic actionplan and suggestions to Eurostat	December 2002
<ul style="list-style-type: none"> <li>▪ Assessment and Evaluatie and adjustment strategic actionplan and suggestions to Eurostat - 2nd European usergroup – Professional contribution American partner (J. Pratt)</li> </ul>	February 2003
<ul style="list-style-type: none"> <li>▪ Final report and European conference</li> </ul>	March2003

Next meeting on **Friday 26<sup>th</sup> April: 13.30**