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THE EU LABOUR FORCE SURVEY AND INDICATORS OF QUALITY IN WORK

Submitted by Eurostat*

I. INTRODUCTION

1. The European Union is committed to the promotion of more and better jobs, as stated by the Lisbon Council in 2000. In order to monitor the implementation of the social policy agenda the European Commission has developed several statistical indicators. The present paper deals with the issues relating to the development of indicators of quality in work. The paper will focus solely on Eurostat's use of the European Union Labour Force Survey (EU-LFS) as the main source for compiling and calculating the indicators.
2. The paper is divided into three main sections, besides the conclusion, which summarises the discussions.
3. The first section gives a short overview of the quality in work dimensions. The Commission has defined 10 main dimensions of quality in work to be monitored, and 31 statistical indicators corresponding to each of the dimensions.

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4. The second section highlights improvements in the EU-LFS that are currently taking place or planned in the foreseeable future. These are changes of the education and training variables in 2003, introduction of six new variables and numerous changes to existing variables from 2006 onwards, current work in order to improve the comparability of the results, as well as enhance the use of the income variable. Related developments are also highlighted in as far as these may affect the development of quality in work indicators.

5. The third section discusses, dimension by dimension, how the EU-LFS can be used in order to improve the existing quality-in-work indicators or how new indicators can be developed from the information available from the EU-LFS. A proxy for job-satisfaction measurements is suggested and the possibilities of new skills and training indicators are discussed, as well as developments in the dimension of gender equality. The paper urges that measurements on time-related underemployment replace that of “involuntary part-time”, and promising development in the dimension of work organisation and work-life balance is described. Finally, the section discusses how data on migrants and annual hours will benefit from data improvements and imputation procedures in the EU-LFS.

II. THE DIMENSIONS OF QUALITY IN WORK

6. The 2001 Commission Communication “Employment and social policies: a framework for investing in quality”¹ recommended the development of ten dimensions of quality in work (Table 1). A more detailed discussion underlying concepts and policy relevance of the European quality-in-work dimensions is to be found in the paper by Lozano (2005).²

Table 1. The 10 quality in work dimensions in the EU

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- | | |
|----|---|
| 1 | Intrinsic job quality |
| 2 | Skills, life-long learning and career development |
| 3 | Gender equality |
| 4 | Health and safety at work |
| 5 | Flexibility and security |
| 6 | Inclusion and access to the labour market |
| 7 | Work organisation and work-life balance |
| 8 | Social dialogue and worker involvement |
| 9 | Diversity and non-discrimination |
| 10 | Overall work performance |

7. The 2003 Commission Communication “Improving quality in work: a review of recent progress”³ recommended 31 indicators covering all the dimensions but one.⁴ The Communication split the indicators into eight key indicators, each corresponding to one dimension⁵ and additional 23 context indicators in order to give a more complete picture.

¹ COM(2001) 313 final, 20.6.2001.

² Lozano, Esteban (2005): Quality in work, dimensions and indicators in the framework of the European employment strategy. Paper presented at the ECE/ILO/Eurostat seminar on measurement of the quality of work 11-13 May 2005.

³ COM(2003) 728 final, 26.10.2003.

⁴ The Communication did not recommend any indicators for the eighth dimension (Social dialogue and worker involvement) but proposed the examination of six possible candidates, including number of days lost in strikes and coverage of collective agreements.

⁵ No key indicators were proposed for the eight and ninth dimensions “social dialogue and worker involvement” and “diversity and non-discrimination”.

8. The European Union Labour Force Survey is the main source for the quality-in-work indicators of the EU. Of the thirty-one indicators, sixteen are based directly on the EU-LFS, while three of the key indicators and thirteen of the context indicators are derived from the EU-LFS (Table 2).

Table 2. EU Quality-in-work indicators by type and source

<i>Total</i>	<i>Key indicators</i>	<i>Context</i>	<i>Source</i>
5	2	3	ECHP
16	3	13	EU-LFS
5	2	3	Other EU-sources
5	1	4	National sources ¹
31	8	23	Total

¹ Two indicators (one key and one context) are from national sources, mainly the LFS

III. RECENT OR PLANNED DEVELOPMENTS IN THE EU-LFS WHICH MAY ADD TO OR IMPROVE THE INDICATORS

9. The European Union LFS has developed since the original quality-in-work indicators were decided. The changes in the EU-LFS will inevitable affect the further development of the indicators. Following is a summary of the major changes in the EU-LFS. The discussion is divided into four main threads. First, the revision of the core module on education and training is discussed. Second, major revision of the survey to be implemented in 2006 onwards is described. Third, certain future developments of the EU-LFS are explained. Finally, other developments relating to the quality indicators and the EU-LFS are briefly considered.

Education

10. In 2003 an ad hoc module on life long learning was implemented with the EU-LFS.⁶ When preparing the ad hoc module it was felt that the current core module on education and training was insufficient and needed to be changed in order to provide more relevant information. To the section on completed education, a variable on the field of education was added while the characteristic on the type of vocational training was dropped.

11. The section on participation in education or training was completely revised. Distinction was made between participation in formal education and participation in courses, seminars and other types of taught activities. Field of the both types of participation was added. The variable on the highest level of completed education was also revised, and the field of this education was added. Table 3 compares the old and new education and training module of the EU-LFS.

⁶ See Commission Regulation (EC) No 1313/2002 (OJ L 192, 20.7.2002, p.16).

Table 3. The module on education and training 1998-2002 and 2003 -

Council Regulation (EC) No 577/98⁷	Commission Regulation (EC) No 2104/2002⁸
<p>(h) education and training</p> <p><i>participation in education or training during previous four weeks:</i></p> <ul style="list-style-type: none"> — purpose, — level, — type, — total length, — total number of hours, — highest successfully completed level of education or training, — year when this highest level was successfully completed, — non-tertiary vocational qualification obtained; 	<p>(h) education and training:</p> <p><i>participation in formal education or training during previous four weeks</i></p> <ul style="list-style-type: none"> — level, — field; <p><i>participation in courses and other taught learning activities during previous four weeks</i></p> <ul style="list-style-type: none"> — total length¹, — purpose of the most recent course or other taught activity, — field of the most recent taught activity, — participated in most recent taught activity during working hours; <p><i>educational attainment</i></p> <ul style="list-style-type: none"> — highest successfully completed level of education or training, — field of this highest level of education and training, — year when this highest level was successfully completed.

¹ Actually the total number of hours.

First major revision of the EU-LFS

12. In 2003 the enabling legislation for the continuous survey, Council Regulation (EC) No 577/98⁹, underwent its first major revision in Regulation (EC) No 2257/2003 of the European Parliament and of the Council¹⁰. Six new variables were added and the possibility of distinguishing between core variables and structural variables was opened. Core variables are to be provided on a quarterly basis, while structural variables are provided only on annual basis as an average of sub-sample observations. The implementation regulation, Commission Regulation (EC) No 430/2005¹¹, which will enter into force from 2006 onwards, defines the structural variables and makes further changes, not only in order to provide a coding scheme for the new variables, but also adjusting the existing variables.

13. The six new variables are listed in Table 4, as well as the major changes to existing variables.

⁷ OJ L 77, 14.3.1998, p. 3.

⁸ OJ L 324, 29.11.2002, p.14.

⁹ OJ L 77, 14.3.1998, p. 3.

¹⁰ OJ L 336, 23.12.2003, p. 6.

¹¹ OJ L 71, 17.3.2005, p. 36.

Table 4. Summary of main changes in the EU-LFS series 2006+

<i>New variables¹</i>		<i>Comments</i>
Continuing receipt of wages and salary		Quarterly
Supervisory responsibilities		Yearly
Involvement of public employment service in finding the current job		Yearly
Contract with a temporary work agency		Yearly
Number of hours of overtime in the reference week		Quarterly, both paid and unpaid
Lack of care facilities		Yearly
<i>Major changes to existing characteristics / variables</i>		
Reason for not having worked at all though having a job	Quarterly	Maternity and parental leave split into two categories
Reasons for part-time work	Yearly	Categories dropped and new added (see Table 5 below).
Income	Yearly	Reduced from five to one variable
Main reason for leaving last job or business	Yearly	Addition of two new categories, related to Lack of care facilities and other personal or family responsibilities
Reasons for not searching an employment	Yearly	Family responsibilities split into two: lack of care facilities and other personal or family responsibilities

¹ All the new characteristics are listed even if not all affect the quality-in-work indicators

Future developments of the EU-LFS

14. In the near and intermediate future development of the EU-LFS is envisaged in two major areas: (a) better comparability between the individual country applications of the EU-LFS, mainly through a comprehensive manual of explanatory notes and model questionnaire sections, and (b) the changing of the status of the income variable from optional to compulsory.¹²

Other developments that will affect the quality-in-work indicators

15. Besides changes in directly related to the core EU-LFS, there are other developments in Eurostat that affect the quality-in-work indicators. Four of these are described below.

Quality profiles. Eurostat has started to develop quality profiles for all of the structural indicators that are currently produced. The quality profiles are based upon Eurostat's quality concept. Within Eurostat, quality in statistics is defined as having six main dimensions; relevance, accuracy, timeliness, accessibility and clarity, comparability and coherence. While quality profiles are mainly targeted to users, experience has shown that quality profiles of this nature are also excellent instruments in improving the statistics themselves.

16. *Ad hoc modules in the EU-LFS.* The EU-LFS provides the possibility of attaching ad hoc modules to the main survey which allow for a more detailed investigation of various subjects related to employment and labour market activities. Six such modules have already been conducted since 1999. Noteworthy ad hoc modules are the module on work organisation and working time arrangements which has been conducted twice in 2001 and 2004¹³, and life-long learning which was implemented in 2003. As it is certain that these and other ad hoc modules will be repeated at some intervals, there will be an opportunity to use these modules for the purposes of putting together long-running time-series or indicators.

¹² The income variable in its current format gives the absolute income levels. It is, however, recognised that comparisons between countries should be avoided since the comparability of the variable cannot be guaranteed. Eurostat will thus only use the variable in order to establish relative outcomes within countries, such as by presenting the data in percentiles.

¹³ Commission Regulation (EC) No 1925/1999 (OJ L 238, 9.9.1999, p.16) and Commission Regulation (EC) No 247/2003 (OJ L 35, 11.2.2003, p.5).

17. *Migrants.* Eurostat plans to conduct an ad hoc module on the labour market status of migrants and their immediate descendants in 2008.¹⁴ Even if this ad hoc module is subject to feasibility study which is not yet concluded, it is already evident that Eurostat and all of the Member States are committed to improve the EU-LFS with regard to statistics on migrants. The major challenges are technical in nature, i.e. concern the removal of biases in the statistics due to non-response or insufficient coverage of the migrant population. Apart from the ad hoc module, the EU-LFS will thus be able to produce on a regular basis basic statistics relating to the labour market integration of the migrant population.

18. *Annual hours.* Measurement of annual hours worked is a vital ingredient of measuring productivity of labour. Eurostat is involved in international cooperation with regard to the development of these statistics. Within Eurostat the different units involved, labour force statistics and national accounts are also working closely together. It is to be expected that from this work valid and reliable estimation techniques will evolve which will produce comparable results across Europe.

IV. THE QUALITY-IN-WORK INDICATORS FROM EU-LFS

19. This section will focus on the dimensions and quality-in-work indicators that use the EU-LFS as the source, either directly or indirectly.¹⁵ Under each dimension the relevant indicators will be listed. The discussion will, however, concentrate on areas of contention and further improvements. Ways to develop current indicators or to improve or add new indicators by using the developments in the EU-LFS described above are discussed.

i) Intrinsic job quality

20. The European Community Household Panel Survey (ECHP) is the only source for the three indicators defined under the dimension on intrinsic policy. This survey has been replaced by the European Union Survey of Income and Living Conditions (EU-SILC). While the EU-SILC, being a panel survey, will be able to provide indicators relating to intrinsic job quality on transitions between employment status by pay levels and type of contract, one context indicator from the ECHP is not carried over to the EU-SILC. This is the variable relating to satisfaction with type of work in present job.

21. It is possible that the EU-LFS could provide a proxy for the job satisfaction indicator. Assuming that there is a positive relationship between dissatisfaction in present job and attempts to find a better job, the EU-LFS provides information on the number of persons in employment who are looking for another job (quarterly) and the reasons for this (yearly). Besides reasons relating to hours of work, the reasons elicit presumed precariousness of the job and a category which directly identifies quality of work, albeit with other factors: "wish to have better working conditions (e.g. pay, working or travel time, quality of work)". How well such an indicator performs compared to external information and how robust the information is, will need to be evaluated.

¹⁴ See Commission Regulation (EC) No 384/2005 (OJ L 61, 8.3.2005, p.23)

¹⁵ Three indicators are derived from the so-called "harmonised unemployment series". These are, however, based on the EU-LFS using auxiliary information to create monthly trends.

ii). Skills, life-long learning and career development

22. The EU-LFS provides the key source for the dimension of skills, life-long learning and career development.¹⁶ The changes made to the EU-LFS in 2003 enable considerable improvement in the developing the dimension further.

23. The 2003 revision distinguishes more clearly between participation in the formal or regular educational system and other types of taught activities, such as courses, seminars, conferences etc. than the list of variables previously. As statistics on participation in the formal educational system is more often than not also available from other sources, making this distinction in the indicator itself would further enhance the policy relevance of the indicator.

24. The new education module in the EU-LFS provides clearer information than before on whether the education or training the respondent participates in is mostly job related or mostly personal. In addition, there is a variable measuring whether the participation in courses and other taught activity is only or mostly inside or outside paid working hours. This variable is considered a good proxy for the involvement of the employers in the continuous education and training of their employees. Both variables are optional, but could nevertheless provide valuable information on the relationship between employment and life-long learning.

25. For both types of participation, formal and non-formal, the field of this education is asked for from 2003. The coding gives a broad classification of the fields of education, with more detailed provided for science, mathematics and computing, as well as foreign languages. Although this variable is optional and will thus not be provided by all the Member States it may prove valuable in monitoring the type of education accessible to the employed persons. Field of education is, however, compulsory for the highest level of completed education. It should be investigated whether this could prove feasible in matching the level and field of education to the occupation/industry in order to measure mismatches with regard to skill level and specialisation.

iii). Gender equality

26. The main measure of gender equality is the differences in income from work that cannot be but attributed to gender discrimination. As the income variables in the EU-LFS are optional only few Member States provide Eurostat with income data, making it impossible for the moment to use the EU-LFS for this purpose. This could change in the near future, with more Member States providing the data or if the status of the variable is changed from optional to compulsory. Eurostat, however, calculates four context indicators which are of interest.¹⁷ These are on the one hand gender differences in employment and unemployment rates and on the other hand indicators of gender segregation by industry and occupational categories.

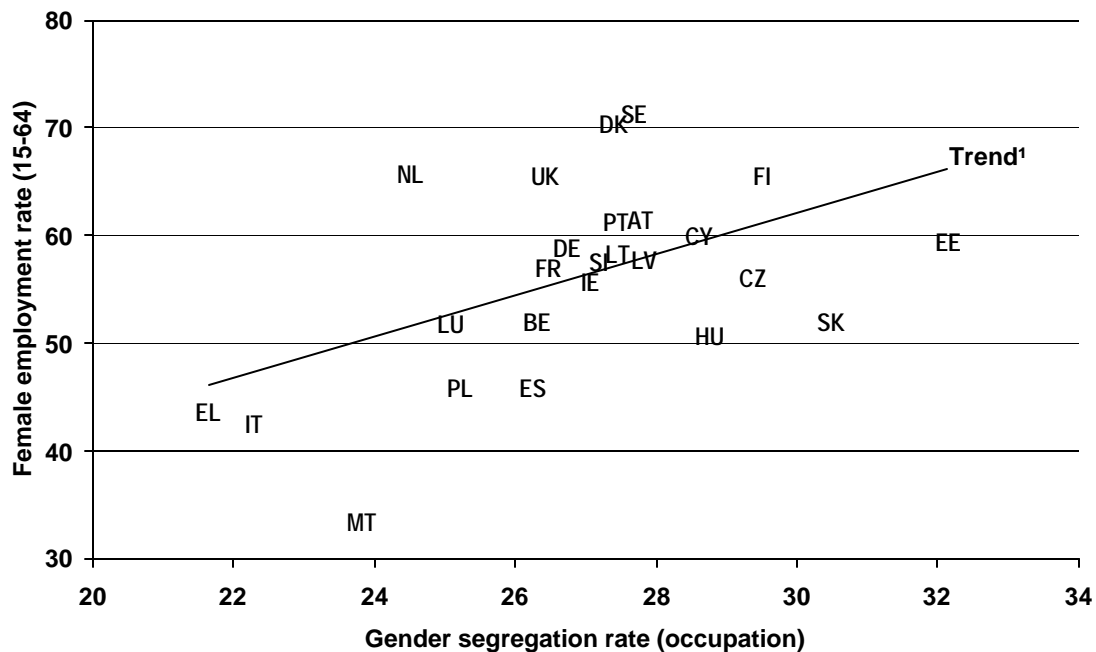
27. The gender segregation index is provided as a percent of the employed population, and refers to the sum of all movements needed in all industry or occupational categories in order for that category to achieve the overall gender balance.¹⁸

¹⁶ Q4. Percentage of working age population participating in education and training, and Q5. Percentage of working age population participating in education and training by gender, age group (25-34, 35-44, 45-54, 55-64 and 25-64 years), working status and educational levels achieved.

¹⁷ Q10. Employment rate gap of women compared with men, Q11. Unemployment rate gap of women compared with men, Q12. Gender segregation in sectors, and Q13. Gender segregation in occupations.

28. The face validity of the segregation indices is relatively good. Nevertheless, a further study is warranted. It is, for example, interesting to note that the higher the female employment rate in an EU country the higher the score on the segregation index (see Figure 1).

Figure 1. Female employment rate with gender segregation rate (occupation) in the EU and New Member States 2003



¹ Adjusted $R^2 = 0.22$.

29. One variable that will be introduced from 2006 onwards in the EU-LFS will possibly be of value in monitoring gender equality in the labour market. This characteristic is “supervisory responsibilities”. It can be argued that gender inequality is also reflected in the fact that women are less likely to assume or acquire formal leadership roles in enterprises.

v). Flexibility and security

30. Within the fifth dimension “Flexibility and security” one indicator has been defined, while a second indicator on the coverage of social security is waiting development. The fifteenth indicator relates to “voluntary and involuntary part-time” and “voluntary and involuntary fixed-term contracts”¹⁹. The following discussion will focus solely on the first part of the indicator.

31. The Community Labour Force Survey prior to the continuous survey in 1998 did not have the range of variables or the sequence of questions needed to determine the incidence of “visible underemployment”, as it was then called. However, a proxy has been available since 1983 in the

¹⁸ The average national share of employment for women and men applied to each occupation/sector. The differences are added to produce a total amount of gender imbalance. This figure is presented as a proportion of total employment

¹⁹ Q15: Number of employees working voluntary and involuntary part-time as % of total number of employees and of those with voluntary and involuntary fixed-term contracts as % of total number of employees.

35. It might be noted in passing that the indicator is on both voluntary and involuntary part-time. In terms of quality in work one should take care of not mixing the two together. While involuntary part-time is related to low quality of jobs, “voluntary” part-time is often seen as beneficial, as it enables persons to combine family and work. Ability to change to part-time when the family situation changes is often regarded as a positive factor in a job; while inability to do so would be considered as a negative attribute.

vi). Inclusion and access to the labour market

36. Five indicators, all having the EU-LFS as source, are defined as context indicators relating to the sixth dimension “Inclusion and access to the labour market”.²¹ All of them are familiar to users of labour statistics, i.e., these are the employment rates, unemployment rates, long term and youth unemployment and percentage of young persons having achieved lower secondary education. No further development of these indicators is envisaged.

vii). Work organisation and work-life balance

37. Presently there are three indicators defined for the seventh dimension, of which two are derived from the EU-LFS.²² One of the main objectives of the last major revision of the EU-LFS was to enhance the statistics relating to the care of dependants as an obstacle for labour market participation. It is to be hoped that the new variable “need for care facilities”, as well as related categories in other variable (see Table 4 above) will provide reliable and relevant information on this aspect of the work-life balance, both with regard to care of children and with regard to care of other dependants.

38. The EU-LFS produces on yearly basis information on the incidence of shift work and work during atypical hours. In addition the ad hoc module that is envisaged to be repeated at fairly short intervals is the module on work organisation and working time arrangements. The module has already been implemented twice in 2001 and 2004. Although the next module will be planned for 2010 at earliest, it is quite conceivable that data from these modules can contribute to an indicator on various aspects of the work organisation and work-life balance, such as flexible working arrangements, convenience of atypical working hours etc.

39. In 2005 the Member States are implementing an ad hoc module on the reconciliation between work and family life.²³ The module aims at examining in detail wishes and lack of care facilities, use of special leaves for family reasons and the degree of flexibility offered by the job in terms of reconciliation with family life. The data will be available in the second quarter 2006.

ix). Diversity and non-discrimination

40. Within the ninth dimension of diversity and non-discrimination there is currently one context indicator defined from the EU-LFS.²⁴

²¹ Q18. Total employment rate, Q19. Employment rate by main age group and educational attainment levels, Q20. Total long-term unemployment rate by gender, Q21. Percentage of 18-24 year olds having achieved lower secondary education (ISCED level 2) or less and not attending further education or training, by gender and working status, and Q22. Youth unemployment ratio: unemployment aged 15-24 as a percentage of the population aged 15-24.

²² Q23. Absolute difference in employment rates without the presence of any children and with presence of a child aged 0-6, by sex (age group 20-50) (key indicator), and Q25. Number of employees who left their last job for family responsibilities or for education purposes no more than 12 months ago who return later to work but are currently not available for work (for the same reasons why they left their last job) as a % of all employees by gender.

²³ See Commission Regulation (EC) No 29/2004 (OJ L 5, 9.1.2004, p.57).

²⁴ Q26. Employment rate gap of 55-64 years olds.

41. As mentioned above there is an ongoing work in order to improve the labour market statistics on migrants. The aim is to be able to produce annually reliable basic statistics related to the integration of migrants in the labour markets of the EU. In 2008 an ad hoc module on the labour market situation on migrants and their descendants will be implemented, if the results from a feasibility study are positive.

42. The EU-LFS is generally not very well suited to identify groups at a disadvantage in the labour market, if the defining characteristics are other than demographic. Nevertheless, in 2002 an ad hoc module on the employment of disabled persons was implemented with the main survey.²⁵ It remains, however, to be seen if and how the EU-LFS can provide data for indicators relating to disabled people in the labour market.

x). Overall work performance

43. The EU-LFS provides one context indicator to the tenth dimension on overall work performance.²⁶ The other two indicators refer to labour productivity to which the EU-LFS contributes indirectly. As mentioned above, better use of EU-LFS data in producing annual hours worked is under investigation, leading to a more reliable and comparable statistics for the indicators.

V. CONCLUSION

44. This paper has focused on the use of the European Union Labour Force Survey as the major source for quality-in-work indicators.

45. Recent changes in the variable structure of the EU-LFS were described as well as relevant developments in labour market statistics in Eurostat.

46. All the 23 indicators from the EU-LFS were discussed briefly within each dimension. The focus, however, was mainly on how the recent and planned developments in the EU-LFS might either improve existing indicators or contribute to the developing of new ones.

47. The paper suggested that a proxy could be found in the existing datasets to replace the job-satisfaction indicator that will not be carried over in the EU-SILC from the ECHP.

48. For the indicators on skills and life-long learning the paper recommended that the new dataset from 2003 onwards would be studied in order to provide more relevant indicators in the second dimension.

49. For the gender equality dimension the new variable on supervisor responsibility will provide a possible indicator from 2006, and with increasing participation of the Member States the income distribution by gender could prove an important addition to the set of indicators.

²⁵ See Commission Regulation (EC) No 1566/2001 (OJ L 208, 1.8.2001, p. 16).

²⁶ Q31. Percentage of working age population having achieved at least upper secondary education (ISCED level 3) by gender, age group (25-34, 35-44, 45-54, 55-64 and 25-64 years) and working status. Although not strictly a "work performance" indicator, the Commission has established that "distribution of skills in the entire economy can affect productivity growth" (Communication to the Council, COM(2003) 728 final, 26.10.2003).

50. For the dimension on flexibility and security the paper urged strongly that statistics on time-related underemployment replace indicators on involuntary part-time work.

51. For the dimension of work organisation and work-life balance the paper pointed out that a new variable and various categories in existing variables enable regular production of statistics regarding need for care facilities in order to participate in the labour market. Recurring ad hoc modules on work organisation and working time arrangements as well as reconciliation of work and family life would also prove a valuable source for indicators within the dimension, albeit not with annual frequency.

52. On diversity and non-discrimination the paper revealed that plans to improve the EU-LFS with regard to coverage of foreign born population would enable better statistics on the integration of the migrant population in the EU labour markets.

Finally, the paper disclosed that development in statistics on annual hours from the EU-LFS would contribute to the improvement on statistics on labour productivity within the dimension of overall work performance.
