

# Handbook on Measuring Quality of Employment – A Statistical Framework

## Addendum 1

Geneva, January 2019

The UNECE Steering Group on Measuring Quality of Employment, as part of its mandate, reviews the [Handbook on Measuring Quality of Employment, A Statistical Framework](#) (UNECE 2015) and identifies areas where updates should be considered to ensure the relevance and practical usability of the Handbook.

During work carried out in 2016-2018, the Steering Group prioritised the following three areas where updates should be considered:

### 1. Discrimination at work

The development of additional specific indicators to measure *discrimination at work* (indicator 1c3) was considered. Section 1 represents a review of discrimination at work indicators and the feasibility of developing new indicators on this topic.

### 2. Work-life balance

A need of further refining the existing indicators on: *employment rate of mothers and fathers* (3c1), *possibility to work at home* (3c2), *commuting time* (3c3), and *care leave entitlement* (3c4) was identified. Furthermore, an expansion of the work-life balance dimension by new indicators on: *care for incapacitated relatives* (3c6), *work intrusion into leisure time* (3c7) and *self-perceived work-life balance* (3c8) was suggested. The updated indicators in Section 2 are presented in the form of *indicator sheets* as they are used in Annex 2 of the Handbook.

### 3. Job satisfaction

An analysis of the indicators in the dimension of *work motivation* (7b) showed a need for an additional indicator on *job satisfaction*. Section 3 consists of an indicator sheet describing the suggested new indicator.

Countries are invited to submit comments on the mentioned topics 1-3, including experiences of testing of suggested possible new or changed existing indicators.

Comments and proposals should be sent to UNECE on [economic.stats@un.org](mailto:economic.stats@un.org). Questions for additional information may be sent to the same email address.

The Steering Group will take all received comments into consideration for possible updates of the Handbook.

### Acknowledgements

The here presented results are outcomes of the whole Steering Group's work. Leading authors were the following experts and members of the Steering Group: Federica Pintaldi (Italy, job satisfaction), Silvia Perrenoud (Switzerland, work-life balance), Christian Wingerter (Eurostat, member until March 2018, work-life balance), and Christine Le Thi and Fabrice Murtin (OECD, discrimination at work).

## Section 1

### Indicator 1c3: Measuring Discrimination at Work

The purpose of this review is to investigate further the concept of Discrimination at work included in the statistical framework established in the UNECE Handbook on Measuring Quality of Employment. Specific goals are to shed more light to the measurement of different types of discrimination and measurement issues, and ultimately, to assess the development of further specific indicators on this issue.

#### 1. Defining the scope of discrimination at work

##### *Definition*

In the Handbook, Discrimination at work is defined as “Experiencing any less favourable treatment that is explicitly or implicitly based on a particular ground (or grounds), such as sex, race, etc. (direct discrimination), or, although neutral on the surface, the same condition, treatment or criterion lead in practice to a harsh impact on some persons on the basis of characteristics such as race, colour, sex, etc. (indirect discrimination)”. Within the statistical framework, discrimination at work is reflected by indicator 1c3 of dimension 1 (Safety and ethics of employment) and sub-dimension c (Fair treatment in employment).

##### *Scope*

The above definition suggests that a comprehensive measurement framework should aim at shedding light on the following aspects of discrimination:

- **Type:** discrimination, harassment, physical violence, intimidation are all compatible with this general definition (“less favourable treatment”). As a general principle, questions covering the most harmful types of discrimination (e.g. sexual harassment) should be kept at the end of the questionnaire.
- **Reason:** sex, age, sexual orientation, ethnic background, religion, disability
- **Origin:** management, clients, colleagues
- **Degrees:** indirect (hidden) vs direct (explicit), episodic or continuous, suggesting a large scale of answer rather than a binomial scale
- **Experience vs perception:** discrimination is an issue where the boundary between experience and perception is difficult to identify, and both could be seen as complementary. Given that the objective is to measure the harm from discrimination, perception-based questions could be fine as a default

#### 2. Taking stock from existing surveys

The OECD Guidelines on Measuring the Quality of the Working Environment provide a useful review of discrimination questions, which are reported in Table 1.

When space is limited to a single question, one could propose the following question (as in the OECD Guidelines) that focuses on psychological harm, but does not necessarily specify it, and uses a detailed response scale:

##### **“I FEEL UNFAIRLY TREATED THROUGH DISCRIMINATION AT WORK.”**

- (1) Completely disagree
- (2) Disagree
- (3) Neither disagree nor agree
- (4) Agree
- (5) Completely agree



### **3. Limitations and the way forward**

Overall, the *French Enquête Conditions du Travail* has a comprehensive set of questions to assess direct and indirect discrimination, with questions of workplace discrimination (e.g. being ignored, being given degrading tasks, being insulted). Some of these questions in relation to indirect discrimination might be included in the *EWCS* survey that is the survey covering the majority of countries in Europe. Another limitation lies on the data availability and country coverage across available sources.

The only survey gathering information for a large number of non-European countries is currently the *ISSP Work Orientation module*. Hence, an improvement in terms of country coverage could be achieved by integrating comparable questions on discrimination in the *ISSP Work Orientation module* for instance. However, at this stage, this includes three broader questions on discrimination only.

In conclusion, when measuring discrimination at work as an aspect of quality of employment, countries are encouraged to follow the recommendations provided in the Handbook on Measuring Quality of Employment for indicator 1c3 Discrimination at work. Discrimination at work involves both conceptual and measurement challenges. For the time being, the Steering Group sees limited possibilities for the development of further indicators on discrimination at work, but will continue following developments in this area and facilitate sharing of experiences and good practices.

## Section 2

### Sub-dimension 3c: Work-life balance

<b>Short name</b>	<b>Employment of mothers and fathers (3c1)</b>
<b>Name</b>	Percentage of both women and men, respectively, aged 25-49 years who are in employment, with and without children under compulsory school age
<b>Dimension and sub-dimension</b>	<p><b>3. Working hours and work-life balance</b></p> <ol style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li><b>c. Work-life balance</b></li> </ol>
<b>Measurement objectives</b>	<p>The balance between work and family life is difficult for parents with young children. Having children can affect labour market participation and especially very young children need intensive care and full-time attendance as they do not go to school, yet. It is important to know what impact childcare responsibilities have on the employment of both sexes:</p> <ol style="list-style-type: none"> <li>1. employment rates</li> <li>2. at-work rates of parents (keep on working or not)</li> </ol> <p>The indicator on employment rates and at-work rates tries to compare the employment situation of parents of (very) young children with that of the general population. At the same time, it differentiates the employment situation of women and men as the effect of parenthood can be quite different. Mothers more frequently leave employment at least temporarily due to family responsibilities than fathers and potentially face disadvantages regarding other aspects of quality of employment (e.g., income, career prospects). A declining employment rate or at-work rate of fathers would indicate that an increasing number of men takes over the care responsibilities in families and stays at home. The indicator on at-work rates is an additional indicator to the employment rates of both sexes.</p> <p>International agreements and conventions:</p> <ul style="list-style-type: none"> <li>• ILO Convention No.156- Workers with Family Responsibilities, 1981</li> <li>• ILO Convention No.175- Part-Time Work Convention, 1994</li> </ul>
<b>Formula</b>	<p>Different age groups of parents can be considered for these two indicators, but it is recommended to analyse persons aged 25-49 as the number of children below compulsory school age is high in these ages (alternatively persons aged 20-49 in countries where the average age of women at their first birth is lower than 25); an upper age limit of 49 years excludes older persons who start to withdraw from the labour market.</p> <p>Additionally, it is recommended to analyse 5-year-age groups for international comparisons to see the differences in the participation rates according to the age of mothers and fathers.</p> <ol style="list-style-type: none"> <li>1. Formula for the employment rates:</li> </ol> <p>This indicator represents the proportion of women and men, respectively, aged 25-49 years with children below compulsory school age who are in employment:</p>

Short name	Employment of mothers and fathers (3c1)
	<p style="text-align: center;"><i>Women in employment</i>  <math display="block">\frac{\text{aged 25 – 49 with children below school age}}{\text{Women aged 25 – 49 with children below school age}} \times 100</math></p> <p style="text-align: center;"><i>Men in employment</i>  <math display="block">\frac{\text{aged 25 – 49 with children below school age}}{\text{Men aged 25 – 49 with children below school age}} \times 100</math></p> <p>An important reference are the employment rates of all women and men of the same age group:</p> <p style="text-align: center;"><math display="block">\frac{\text{Women in employment aged 25 – 49}}{\text{Women aged 25 – 49}} \times 100</math></p> <p style="text-align: center;"><math display="block">\frac{\text{Men in employment aged 25 – 49}}{\text{Men aged 25 – 49}} \times 100</math></p> <p>2. Formula for the at-work rates:</p> <p>This indicator represents the proportion of women and men, respectively, aged 25-49 years with children below compulsory school age who were at work during the reference week:</p> <p style="text-align: center;"><i>Women at work in the reference week</i>  <math display="block">\frac{\text{aged 25 – 49 with children below school age}}{\text{Women aged 25 – 49 with children below school age}} \times 100</math></p> <p style="text-align: center;"><i>Men at work in the reference week</i>  <math display="block">\frac{\text{aged 25 – 49 with children below school age}}{\text{Men aged 25 – 49 with children below school age}} \times 100</math></p> <p>An important reference are the at-work rates of all women and men of the same age group:</p> <p style="text-align: center;"><math display="block">\frac{\text{Women at work in the reference week aged 25 – 49}}{\text{Women aged 25 – 49}} \times 100</math></p> <p style="text-align: center;"><math display="block">\frac{\text{Men at work in the reference week aged 25 – 49}}{\text{Men aged 25 – 49}} \times 100</math></p>
<b>Concepts and definitions</b>	<p><i>Employed persons</i>: Employment defined according to the resolution of the 19th ICLS in 2013 (see glossary).</p> <p><i>At-work</i>: persons who were working in the reference week for at least one hour.</p> <p><i>Children below compulsory school age</i> living in the household. The age limit should be considered in each country according to respective national law.</p>

<b>Short name</b>	<b>Employment of mothers and fathers (3c1)</b>
	<i>Parents</i> are identified by the survey, normally living in the same household as the children, having legal guardianship including partner's children living in the same household.
<b>Recommended data source(s)</b>	<p>A household-based Labour Force Survey (LFS) is the recommended data source, as it permits one to estimate the number of employed persons and it allows disaggregation by demographic variables. Also, some employment characteristics like part-time or specific working-time arrangements can be taken into account.</p> <p>The EU-LFS also provides information on the household structure, number and age of children living in households. Its international harmonisation (to varying degrees) has the additional advantage of a better comparability between countries.</p> <p>If no LFS is available, other household surveys with an employment module are recommended.</p>
<b>Recommended metadata</b>	It is recommended to make available metadata on the source (periodicity, breaks in series, etc.), on the reference period, on the population, job coverage (main job or all jobs). This indicator should be disaggregated by sex, by geographical area and social/ethnic groups in order to portray any differences of parents from different backgrounds.
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Age</li> <li>• Working full- or part-time</li> <li>• Educational attainment</li> <li>• Marital (cohabitation) status</li> <li>• Number of children (below compulsory school age)</li> <li>• Age of children</li> <li>• Use of childcare services</li> </ul>
<b>Interpretation guidelines</b>	<p>By comparing the different rates, inferences about the employment situation of parents of young children and the differing consequences for women and men can be examined.</p> <p>Besides directly comparing the different employment rates and at-work rates, also the difference in percentage points between mothers, respectively fathers with the whole age group of women, respectively men can provide an informative measure for the effect of parenthood.</p> <p>Comparing the employment rates or the at-work rates of parents with young children with those of all 25-49 year olds shows how good employment in general can be reconciled with care. If differences are rather small, the work arrangements might offer enough flexibility, parental leave might offer the chance for providing the necessary care without completely dropping out of the labour market or parents find enough support by care institutions of families and informal networks to stay in employment. On the other hand, significantly lower rates for young parents might indicate obstacles for reconciliation because of which mostly women leave employment. Higher rates might indicate that the necessary higher income of a young family cannot be met. In couples this often forces men to work more and single mothers may have to return to work despite inconvenient conditions.</p>

Short name	Employment of mothers and fathers (3c1)
<b>Relation to other indicators</b>	<p>An analysis together with other indicators of dimension 3 like the volume of working hours or the occurrence of different working time arrangements could provide additional insight.</p> <p>As supplementary indicators the percentage of parents on parental leave or such on the offer and use of professional childcare could be helpful. Labour force participation and unemployment rate of both sexes could provide an additional wider context for interpreting this indicator.</p>
<b>International comparisons</b>	<p>For each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation.</p> <p>The age of compulsory school education can be different between countries, cover an age range and the actual age of school entry may deviate. No matter if actual school attendance, the ages used in the approach should be made transparent (whether internationally common or varying). Possible effects on the comparability of the rates should be discussed.</p> <p>Despite the ILO standards for measuring employment there can be differences in detail that distort the comparison of employment rate. This is relevant here for persons on parental leave who consequently are temporarily absent from work and if they are counted as being employed or not. The required criteria of the 19<sup>th</sup> ICLS resolution indicating job attachment leave some flexibility for implementation and consequently limit international comparability. Before analysis it should be checked in how far the national implementations could deviate and influence the comparison. In this respect, at-work rates might give a more comparable information. They offer a different perspective and hence a broader view on the issue. It should be noted too that family leave systems and day care patterns considerably vary by country as well. Cultural norms can also have an important impact on the employment situation of parents.</p>
<b>Recommended calculation in the EU-LFS or other international surveys</b>	<p>To calculate and disaggregate this indicator, it is recommended to use the following EU-LFS variables:</p> <ul style="list-style-type: none"> <li>• Target population: HHTYPE = 1 and AGE = 25 – 49 years</li> <li>• Employed persons: WSTATOR in (1, 2)</li> <li>• AGE of child &lt; at least one below compulsory school age</li> <li>• SEX</li> <li>• FTPT</li> <li>• STAPRO</li> <li>• Reason for not having worked: NOWKREAS in (5, 6)</li> </ul>
<b>Further readings</b>	<p>ILO, 1981: ILO Convention No.156- Workers with Family Responsibilities, 1981. Available at:  <a href="http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312301:NO">http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312301:NO</a></p> <p>ILO, 1994: ILO Convention No.175- Part-Time Work Convention, 1994. Available at:  <a href="http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C175">http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C175</a></p> <p>Statistisches Bundesamt (Destatis), 2018: Realisierte Erwerbstätigkeit zur Messung des Vereinbarkeitsarrangements von Familie und Beruf, 2018.</p>

Short name	Employment of mothers and fathers (3c1)
	Available at: <a href="https://www.destatis.de/DE/Publikationen/WirtschaftStatistik/2018/01/RealisierteErwerbstaetigkeit_012018.pdf?__blob=publicationFile">https://www.destatis.de/DE/Publikationen/WirtschaftStatistik/2018/01/RealisierteErwerbstaetigkeit_012018.pdf?__blob=publicationFile</a>

<b>Short name</b>	<b>Working at home (3c2)</b>
<b>Name</b>	Percentage of employed persons who have the possibility to work at home
<b>Dimension and sub-dimension</b>	<b>3. Working hours and work-life balance</b> <ol style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li>c. <b>Work-life balance</b></li> </ol>
<b>Measurement objectives</b>	<p>Working at home is an indicator of work arrangements that among others facilitate the reconciliation between employment and private life. Work at/from home can help to increase individual margin and convenience independent from care responsibilities but is especially helpful in that regard.</p> <p>The exact arrangement of homework is not specified: if it can only be used on special grounds like care responsibilities, is done after a fixed schedule or flexibly chosen by the employee. For self-employed it is more the nature of their work that influences if they can work from home.</p>
<b>Formula</b>	$\frac{\text{Number of employed persons who usually or sometimes work at home}}{\text{Total number of employed persons}} \times 100$
<b>Concepts and definitions</b>	<p><i>Working at home</i>: doing any work related to the person's current jobs at home but at least one hour in a reference week (including regular hours and overtime).</p> <p><i>Employed persons</i> (age 15+): Employment is defined according to the resolution of the 19th ICLS in 2013 (see glossary).</p>
<b>Recommended data source(s)</b>	<p>A household-based Labour Force Survey (LFS) is the recommended data source, as it permits one to estimate the number of employed persons and it allows disaggregation by economic activity and demographic variables such as sex, age group, etc.</p> <p>The EU-LFS provides information on persons in employment actually working at home. In the absence of corresponding data from a Labour Force Survey it can also be retrieved from another Social Survey.</p>
<b>Recommended metadata</b>	<p>For this indicator, it is recommended that, as a minimum, metadata on the source (periodicity, breaks ins series, etc.), reference period and population coverage is provided. Breakdowns of the indicator by component groups such as sex, industries, occupational group, and status in employment provide measures by which to evaluate the relative differences in percentage of employed persons whose working arrangements offer the possibility to work at home.</p>
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Sex</li> <li>• Age</li> <li>• Economic activity (ISIC)</li> <li>• Occupational group (ISCO)</li> <li>• Status in employment (ICSE-93)</li> <li>• Full-, part-time employment</li> <li>• Educational attainment</li> </ul>

<b>Short name</b>	<b>Working at home (3c2)</b>
	<ul style="list-style-type: none"> <li>• Number of children in household</li> <li>• Age of youngest child</li> <li>• Degree of urbanisation.</li> </ul>
<b>Interpretation guidelines</b>	<p>Balance between work and daily life is a challenge that all workers face. Working at home provides an opportunity for employed persons to work in a way that is more compatible with their other commitments. For example, it enables parents to spend more time with their children or some have more time for themselves. A higher local proximity to those other commitments but often also a greater flexibility to decide about the work schedule at home support this. People with a long commute can save that time when they are doing homework.</p> <p>However, working from home can also be problematic. The possibility to work at home may easily result in overwork but also presupposes the capability to motivate one-self. It lies more in the person's hands to manage the balance between work and private life. Homework can also translate into blurring boundaries between work and leisure and a constant "contactability" from the work. The inability to reconcile work and private life may have a negative effect on stress levels, health, the family life and general well-being. Another negative aspect might be that working at home often reduces opportunities to participate in social activities.</p>
<b>Relation to other indicators</b>	<p>The indicator should also be analysed together with indicators concerning working-time flexibility in dimension 3, the commuting time (3c6) and assessing the positive labour market effects of homework for parents (3c1).</p> <p>When covering the possibility, the indicator could be compared with indicator 5.1 (collective bargaining rate) or 5.2 (trade union density rate). When covering the actual use this indicator could also be analysed in relation to various indicators in dimensions 6 and 7 to analyse if people doing homework keep up with skill development, motivation and the contact with their colleagues.</p>
<b>International comparisons</b>	For each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation.
<b>Recommended calculation in the EU-LFS or other international surveys</b>	<p>The EU-LFS asks for the use of homework.</p> <ul style="list-style-type: none"> <li>• Target population: employed persons (HHTYPE = 1 and WSTATOR in (1, 2))</li> <li>• Person usually or sometimes works at home (HOMEWK=1,2)</li> <li>• For break downs: SEX, AGE, FTPT, STAPRO, ISCO4D</li> </ul>
<b>Further readings</b>	<p>ILO, 1996: Home Work Convention, 1996, No.177. Available at:  <a href="http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C177">http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C177</a></p> <p>European Commission, 2009: Flexible working time arrangements and gender equality, European Commission. Available at:  <a href="http://ec.europa.eu/social/BlobServlet?docId=6182&amp;langId=en">http://ec.europa.eu/social/BlobServlet?docId=6182&amp;langId=en</a></p> <p>Eurostat, 2009: Reconciliation between work, private and family life in the European Union. Available at:</p>

Short name	Working at home (3c2)
	<p data-bbox="539 212 1315 277"><a href="http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-09-908/EN/KS-78-09-908-EN.PDF">http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-09-908/EN/KS-78-09-908-EN.PDF</a></p> <p data-bbox="459 331 1206 398">OECD, 2014: OECD Family Database, OECD, Paris. Available at: <a href="http://www.oecd.org/social/family/database">www.oecd.org/social/family/database</a></p>

<b>Short name</b>	<b>Commuting time (3c3)</b>
<b>Name</b>	Mean duration of commuting time between work and home (one way)
<b>Dimension and sub-dimension</b>	<b>3. Working hours and work-life balance</b> <ol style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li>c. <b>Work-life balance</b></li> </ol>
<b>Measurement objectives</b>	<p>Being employed not only involves the time spent at the workplace, but often also considerable time spent commuting. Consequently, commuting time can be a crucial factor when analysing work-life-balance.</p> <p>This indicator provides an estimate for the usual time spent to get from home to the place of work.</p>
<b>Formula</b>	The average daily time in minutes employed persons usually spend under normal conditions commuting from home to work without detours and one way.
<b>Concepts and definitions</b>	<p><i>Employed persons</i> (age 15+): Employment is defined according to the resolution of the 19th ICLS in 2013 (see glossary).</p> <p>One way <i>commuting time</i> from home to main job under normal conditions and on the direct way. If normally other errands are done on the way to work an estimated time without those detours should be counted.</p>
<b>Recommended data source(s)</b>	<p>A household-based Labour Force Survey (LFS) is the recommended data source, as it permits one to estimate the number of employed persons and it allows an analysis in combination with regional information, degree of urbanisation, industry, occupation and educational attainment, which might all be relevant for commuting distance and time.</p> <p>In the absence of Labour Force Survey records, data from Social Surveys could be used or through a mobility survey or other household survey. In particular, Time Use Surveys can be a suitable data source, as they usually provide detailed information on commuting time.</p>
<b>Recommended metadata</b>	For this indicator, it is recommended that, as a minimum, metadata on the source (periodicity, breaks in series, etc.), reference period and population coverage are provided. Breakdowns of the indicator by component groups such as sex, region, industries, occupational group, and status in employment provides measures by which to evaluate the relative differences in mean duration of commuting time between work and home.
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Sex</li> <li>• Age</li> <li>• Region</li> <li>• Degree of urbanisation</li> <li>• Economic activity (ISIC)</li> <li>• Occupation (ISCO)</li> <li>• Status in employment according to the ICSE-93 (particularly self-employed workers vs. employees)</li> <li>• Full-time vs. part-time workers</li> <li>• Mode of transport</li> </ul>

Short name	Commuting time (3c3)
<b>Interpretation guidelines</b>	Long commuting times normally have a negative influence on job quality, because they reduce the time available for private life and commuting can be stressful, tiring and expensive. With the energy and time invested into commuting it can even have negative effects on the performance at work.
<b>Relation to other indicators</b>	The indicator should also be analysed together with indicators of dimension 3 especially in connection with homework (3c5) and the other indicators regarding work-life-balance. It can also be interesting to compare the extend of commuting with the indicator on actual days of sick leave (2b6).
<b>International comparisons</b>	For each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation. It should be explicitly documented how the data on commuting time is collected because this information is especially sensitive to the question wording. Also, deviations from the specification under "Formula" can have significant impact on the results and should be documented.
<b>Recommended calculation in the EU-LFS or other international surveys</b>	The EU-LFS does currently not cover commuting time. The variable on commuting time COMMUTM is included in the ad-hoc module 2019 on work organization and working time arrangements.
<b>Further readings</b>	<p>ONS, 2014: Commuting and Personal Well-being, 2014. Available at: <a href="http://www.ons.gov.uk/ons/rel/well-being/measuring-national-well-being/commuting-and-personal-well-being--2014/art-commuting-and-personal-well-being.html">http://www.ons.gov.uk/ons/rel/well-being/measuring-national-well-being/commuting-and-personal-well-being--2014/art-commuting-and-personal-well-being.html</a></p> <p>Roberts, J, R. Hodgson, and P. Dolan, 2009: It's driving her mad: gender differences in the effects of commuting on psychological well-being. In: Journal of Health Economics 30, pp. 1064-76.</p> <p>Stutzer, A and B. Frey, B., 2008: Stress that doesn't pay: the commuting paradox. In. Scandinavian Journal of Economics 110, pp. 339-366.</p>

<b>Short name</b>	<b>Care leave entitlement (3c4)</b>
<b>Name</b>	Percentage of employees entitled to additional leave that can be taken spontaneously for care responsibilities for children or adults
<b>Dimension and sub-dimension</b>	<b>3. Working hours and work-life balance</b> <ol style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li>c. <b>Work-life balance</b></li> </ol>
<b>Measurement objectives</b>	<p>This indicator is designed to give information on employed persons entitled to get additional leave in order to meet their care responsibilities for children or dependent adults. It indicates if parents can use additional means of flexibility to reconcile work and care. It does not cover planned long-term family leaves, but leaves taken at short notice because of an urgent need for more care. Those leaves would typically only be a few days.</p> <p>The purpose of this indicator is to assess the prevalence of extra rights for care responsibilities in order to facilitate the reconciliation between care responsibilities and work.</p>
<b>Formula</b>	$\frac{\text{Number of employees entitled to take days off for care responsibilities}}{\text{Total number of employees}} \times 100$
<b>Concepts and definitions</b>	<p><i>Entitlement to additional leave for care responsibilities:</i> Care includes all care responsibilities for own children (up to 15) and older relatives (e. g. spouse, parents or older children) who need care because of their age, disability or illness. The additional leave should be included regardless of whether it is paid or unpaid.</p> <p><i>Employed persons (age 15+):</i> Employment is defined according to the resolution of the 19th ICLS in 2013 (see glossary).</p>
<b>Recommended data source(s)</b>	<p>A household-based Labour Force Survey (LFS) is the recommended data source, as it permits to estimate the number of employed persons and it allows disaggregation by economic activity and demographic variables such as sex, age group, etc.</p> <p>In the EU, for 2010 and 2018, the EU LFS provides corresponding information. In the absence of Labour Force Survey records, some of the data can also be obtained from the administrative data on child care.</p> <p>Data from labour force surveys should be used for the denominator of the indicator.</p>
<b>Recommended metadata</b>	<p>For this indicator, it is recommended that, as a minimum, metadata on the source (periodicity, breaks ins series, etc.), reference period and population coverage is provided. Breakdowns of the indicator by component groups such as sex, age, industries and occupation could be added.</p>

Short name	Care leave entitlement (3c4)
	Background information on national legal regulations of care leave entitlements or if and how agreements on the industrial or enterprise level are made.
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Sex</li> <li>• Age</li> <li>• Number of days of additional leave</li> <li>• Paid, unpaid, state aids</li> <li>• Entitlement by law, agreement etc.</li> <li>• Economic activity (ISIC)</li> <li>• Occupational group (ISCO)</li> <li>• Full-time vs. part-time workers</li> <li>• Status in employment according to the ICSE-93 (particularly self-employed workers vs. employees)</li> </ul>
<b>Interpretation guidelines</b>	<p>Additional days of leave that can be taken at short notice can help employed persons to balance the demands of work and family. Especially in cases of unforeseen emergencies or when a dependent person at short-term needs more care.</p> <p>Additional (paid) leave is essential for working persons to fulfil care responsibilities and at the same time stay fully in employment, pursue a professional career, have a sufficient income and also meet personal needs like recovery. It is important for the quality of family life.</p> <p>A high ratio indicates favourable conditions for employed persons and a good basis for the reconciliation between work and non-working life.</p> <p>It should be noted that persons who do not request that additional leave might not be aware of that right. Respondents who answered "don't know" should be excluded from the calculation of the ratio.</p>
<b>Relation to other indicators</b>	<p>It is recommended to analyse the indicator together with the indicators of Dimension 3 (Working hours and work-life balance), especially with indicator 3c1 to assess if parents with that right and additional option for reconciliation are more likely to stay in employment and if the additional leave rights go together with a general flexibility of work schedules (3b4) or balance more rigid work arrangements. Information on parental leave, being corresponding long-term leaves, can help to complement the analysis.</p> <p>For assessing the more general impact the indicator can be analysed together with the gender specific labour force participation, employment rate and prevalence of part-time work especially among women.</p>
<b>International comparisons</b>	<p>Nationally different ways of regulating additional leave have to be known for international comparisons (regional or industry-related agreements). Also, the prevalence of part-time work or overall flexibility of working time regimes has to be taken into account to be able to sufficiently assess the meaning of the indicator.</p> <p>In general, for each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation. In particular, it is important that countries use data that was produced following the same concepts and definitions.</p>

Short name	Care leave entitlement (3c4)
<p><b>Recommended calculation in the EU-LFS or other international surveys</b></p>	<p>To calculate and disaggregate this indicator, it is recommended to use the following EU-LFS variables:</p> <ul style="list-style-type: none"> <li>• Target population: employed persons (HHTYPE = 1 and WSTATOR in (1, 2))</li> <li>• Rate of employees generally having the possibility of taking additional days off: <math>3c4 = \frac{POSORGWT=1}{POSORGWT \text{ in } (2,3)} \times 100</math> (included in AHM 2010 and 2018)</li> </ul>
<p><b>Further readings</b></p>	<p>ILO, 1981: ILO Convention: Workers with Family Responsibilities, 1981(No. 156). Available at:  <a href="http://www.ilo.org/gender/Informationresources/Publications/WCMS_114192/lang--en/index.htm">http://www.ilo.org/gender/Informationresources/Publications/WCMS_114192/lang--en/index.htm</a></p> <p>UN, 1989: The UN Convention on the Rights of the Child</p>

<b>Short name</b>	<b>Care for incapacitated relatives (3c6)</b>
<b>Name</b>	Percentage of persons with care responsibilities for incapacitated relatives who adapted their employment.
<b>Dimension and sub-dimension</b>	<p><b>4. Working hours and work-life balance</b></p> <ul style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li><b>c. Work-life balance</b></li> </ul>
<b>Measurement objectives</b>	<p>This indicator is designed to give information if employed persons who take care of incapacitated relatives make changes in their job in order to reconcile their care tasks with the job. These changes can range from shifting working hours to quitting a job completely.</p> <p>The indicator informs if taking care for older relatives in need for care has an impact on work. Those care responsibilities can be expected to be more varied than care for children ranging from some support in various errands to very intensive care comparable to that of young children. A higher frequency of care for incapacitated relatives can inform how prevalent private care is and in how far it influences the possibility to fully engage on the labour market.</p>
<b>Formula</b>	<p>The indicator calculates the rate for all persons with current care responsibilities for incapacitated relatives who are either out of the labour force for that reason or made changes in their current job to facilitate these care responsibilities.</p> $\frac{\text{Persons who adapted their current job or who are out of the labour force because of care for incapacitated relatives}}{\text{Persons caring for incapacitated relatives}} \times 100$
<b>Concepts and definitions</b>	<p><i>Adaption of job:</i> This bases on a specific variable were modalities for adaption are (a) change of work schedule, (b) less demanding tasks in job, (c) less working hours, (d) change of employer, (e) currently on care leave and (f) other change.</p> <p><i>Out of the labour force:</i> People out of the labour force are according to the 19th ICLS resolution not in employment and were not seeking employment in the four weeks up to the end of the reference week and or not available for employment within the two weeks following the reference week.</p> <p>Persons who were out of the labour force because of care responsibilities were either not seeking or not available because of taking care of incapacitated relatives.</p> <p><i>Incapacitated relatives</i> are any kind of relatives with special need of care being long-term ill, handicapped or elderly, including the own children from the age of 15. Care for the spouse or partner is also included. Care is counted irrespective of whether the attended person lives in the same household or not.</p> <p><i>Taking care</i> is specified for the EU-LFS as looking after or providing help. Care should only be counted if it is performed on a regular not just occasional basis. Examples of caring tasks are personal care (e.g. dressing, washing,</p>

<b>Short name</b>	<b>Care for incapacitated relatives (3c6)</b>
	feeding), physical help (e.g. walking), support in health care, giving a ride, helping with paperwork or financial matters, domestic help (e.g. housework, laundry, groceries).
<b>Recommended data source(s)</b>	<p>A household-based Labour Force Survey (LFS) is the recommended data source, as it permits to identify persons in and out of the labour force, collects data on reasons for not being in the labour force, provides information about care responsibilities and allows disaggregation by demographic variables, such as sex, age group, and household structure.</p> <p>In the EU, for 2010 and 2018, the EU-LFS provides corresponding information on care. The reasons for not seeking / not being available don't differentiate between care for children and care for older dependents. Persons out of the labour force because of care for incapacitated relatives can only be calculated together with the future repeated LFS-module on reconciliation and even then (according to current planning) it could only be done with additional assumptions.</p> <p>In the absence of a detailed measurement of reactions to care of incapacitated relatives LFSs can provide some information on reasons for part-time work and being out of the labour force. If care for incapacitated relatives or adults is collected as separate reason a version of the indicator can be calculated.</p>
<b>Recommended metadata</b>	<p>For this indicator, it is recommended that, as a minimum, metadata on the source (periodicity, breaks ins series, etc.), reference period and population coverage is provided. Breakdowns of the indicator by component groups such as sex, age, industries and occupation should be added.</p> <p>Background information on national legal regulations of care leave entitlements or if and how agreements on industrial or enterprise level are made.</p>
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Sex</li> <li>• Age</li> <li>• Modality of adaption of employment</li> <li>• Care intensity (hours spend on care)</li> <li>• Adaption is reversible or not.</li> <li>• Adaption is facilitated by law or collective agreement</li> <li>• Economic activity (ISIC)</li> <li>• Occupational group (ISCO)</li> <li>• Full-time vs. part-time workers</li> <li>• Status in employment according to the ICSE-93 (particularly self-employed workers vs. employees)</li> </ul>
<b>Interpretation guidelines</b>	<p>This indicator gives an encompassing idea if people with care responsibilities change something about their employment. These changes can be quite different. That for it is recommended to interpret it broken down by the modality of adaption. As case numbers are normally rather small at least a break down for not in the labour force and other adaptations should be made.</p>

<b>Short name</b>	<b>Care for incapacitated relatives (3c6)</b>
	This indicator shows that care for older relatives in need has an impact on employment but not necessarily if it is good or bad. Working part-time temporarily or being on a care leave can mean that there are measures in place that allow for a better reconcilability of work and care.
<b>Relation to other indicators</b>	<p>For demographic and other structural reasons, the impact of a high load of caretaking on the whole labour force can differ highly between countries. For instance, an increasing need for care because of demographic trends could be counterbalanced by an improving professional care infrastructure. That for the share of persons with actual care responsibilities for adult relatives, demographic trends and figures e. g. on places in retirement homes should also be taken into consideration.</p> <p>The indicator should also be analysed together with the indicators of Dimension 3 (Working hours and work-life balance).</p>
<b>International comparisons</b>	In general, for each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation. In particular, it is important that countries use data that was produced following the same concepts and definitions.
<b>Recommended calculation in the EU-LFS or other international surveys</b>	<p>To calculate and disaggregate this indicator, it is recommended to use the following EU-LFS variables:</p> <ul style="list-style-type: none"> <li>• Target population: employed with care responsibilities for incapacitated relatives: CARERES in (5-8).</li> <li>• Care for dependent relatives having any effect on current employment (variable is not yet developed).</li> <li>• Being out of the labour force for care reasons: ILOSTAT = 3 and (SEEKREAS = 4 or WANTREAS = 3 or AVAIREAS =3).</li> </ul>
<b>Further readings</b>	<p>ILO, 1981: ILO Convention: Workers with Family Responsibilities, 1981(No. 156). Available at:  <a href="http://www.ilo.org/gender/Informationresources/Publications/WCMS_114192/lang--en/index.htm">http://www.ilo.org/gender/Informationresources/Publications/WCMS_114192/lang--en/index.htm</a></p> <p>UN, 1989: The UN Convention on the Rights of the Child</p>

<b>Short name</b>	<b>Work intrusion into leisure time (3c7)</b>
<b>Name</b>	Percentage of persons in employment who have to handle work tasks during leisure time and the frequency of such work tasks
<b>Dimension and sub-dimension</b>	<b>3. Working hours and work-life balance</b> <ol style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li>c. <b>Work-life balance</b></li> </ol>
<b>Measurement objectives</b>	<p>With modern technologies also professional emails can be checked from everywhere and employees as well as self-employed can be easily reached by mobile phone. The general work pace has increased and going hand in hand with higher expectation also towards employees outside the higher management and persons having their own business are often expected to be available at short notice.</p> <p>This means that work-life-balance might not only be shifted towards work by additional working hours but also by a blurring of the boundaries between the two areas and that persons have to deal with work tasks from their job even though they are actually off work.</p> <p>This indicator measures how many persons in employment have to deal with work tasks in their leisure time and how frequently these take place.</p>
<b>Formula</b>	<p>The percentage of persons in employment that had to be available for work during free time in the last two months:</p> $\frac{\text{Number of employed persons who during the last two months had to be available for work during leisure time}}{\text{Number of employed persons}} \times 100$ <p>Additionally, the frequency of availability for work in the reference period (in predefined classes</p> $i): \frac{\text{Number of employed persons who during the last two months had to be available for work during leisure time and whose frequency falls into the class } i}{\text{Number of employed persons who during the last two months had to be available for work during leisure time}} \times 100$
<b>Concepts and definitions</b>	<p><i>Availability during leisure time:</i> the person in employment was contacted at least three times during the last two months ending with the reference week and had to act before the next working day.</p> <p><i>Employed persons (age 15+):</i> Employment is defined according to the resolution of the 19th ICLS in 2013 (see glossary).</p>
<b>Recommended data source(s)</b>	<p>A household-based Labour Force Survey (LFS) is the recommended data source, as it permits to collect this kind of information directly from the persons in employment and allows disaggregation by other employment characteristic, most importantly status in employment but also economic activity and occupation, and demographic variables.</p> <p>The EU-LFS only provides corresponding data through an additional question module conducted in 2019. Alternatively, the information could also be gained/collected through a social survey or survey on working conditions.</p>
<b>Recommended metadata</b>	For this indicator, it is recommended that, as a minimum, metadata on the source (periodicity, breaks in series, etc.), reference period and population

Short name	<b>Work intrusion into leisure time (3c7)</b>
	coverage is provided. Breakdowns of the indicator by component groups such as sex, industries, occupational group, and status in employment provides measures by which to evaluate the relative differences in percentage of employed persons who have to handle work tasks during leisure time.
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Sex</li> <li>• Age</li> <li>• Status in employment (ICSE-93)</li> <li>• Full-, part-time employment</li> <li>• Economic activity (ISIC)</li> <li>• Occupational group (ISCO)</li> <li>• Educational attainment</li> </ul>
<b>Interpretation guidelines</b>	<p>A high share of employed persons who have to be available during leisure time and especially combined with a high frequency of it means that for many persons in employment the boundaries between work and private life are actually blurred. This can be understood as an intrusion of working matters into private life and a rather negative effect on work-life-balance.</p> <p>Relevant other aspects to consider are if persons with blurred boundaries have also rather flexible working times or can influence their working times freely, the volume of weekly working hours and if they have a clearly fixed working place. Another very important dimension is if the person is self-employed or working in an occupation where the blurring of boundaries is more likely or a logical consequence of the nature or work. Thus, if there is an increase in this indicator it should be checked if there is a change in such underlying structures and if e.g. the share of self-employed has increased.</p>
<b>Relation to other indicators</b>	<p>The indicator should also be analysed together with other indicators in dimension 3, especially long working hours (3a3), distribution of working hours (3a4), multiple job holders (3a5), all indicators of sub-dimension 3b and the possibility to work at home (3c5).</p> <p>An analysis together with the indicator on access to managerial positions (1c2) and the indicators from the sub-dimension on security of employment (4a) could help to identify groups which are more likely to be confronted with blurred boundaries between work and private life. A cross check with indicator 5.1 (collective bargaining rate) or 5.2 (trade union density rate) could show if with strong unions blurred boundaries are less likely.</p>
<b>International comparisons</b>	For each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation.
<b>Recommended calculation in the EU-LFS or other international surveys</b>	<p>The EU-LFS covers this topic like:</p> <ul style="list-style-type: none"> <li>• Target population: employed persons (HHTYPE = 1 and WSTATOR in (1, 2))</li> <li>• Persons available for work in free time within the last two months: in the EU-LFS ad hoc module 2019 AVAIFREE = 3 "Was contacted several times and expected to act before the next working day".</li> </ul>

<b>Short name</b>	<b>Work intrusion into leisure time (3c7)</b>
	<ul style="list-style-type: none"> <li>• For break downs: SEX, AGE, STAPRO, HWUSUAL, NACE3D, ISCO4D, VARIWT (variability of working time arrangements), FLEXWT (frequency at which worker has to adapt working times).</li> </ul>
<b>Further readings</b>	<p>European Commission, 2009: Flexible working time arrangements and gender equality, European Commission. Available at:  <a href="http://ec.europa.eu/social/BlobServlet?docId=6182&amp;langId=en">http://ec.europa.eu/social/BlobServlet?docId=6182&amp;langId=en</a></p> <p>International Labour Office, 1999. Decent work, Report of the Director-General to the International Labour Conference, 87th Session, Geneva.</p> <p>International Labour Office, 2007: Decent working time - Balancing workers' needs with business requirements, Geneva,  <a href="http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_145391.pdf">http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_145391.pdf</a></p>

<b>Short name</b>	<b>Self-perceived work-life-balance (3c8)</b>
<b>Name</b>	Percentage of persons in employment that think that their work goes along well or very well with their family and social commitments.
<b>Dimension and sub-dimension</b>	<b>3. Working hours and work-life balance</b> <ol style="list-style-type: none"> <li>a. Working hours</li> <li>b. Working time arrangements</li> <li>c. <b>Work-life balance</b></li> </ol>
<b>Measurement objectives</b>	<p>A good work-life-balance has many different factors influencing it. The indicators of dimension 3 cover several of them. There are job characteristics like the flexibility of working time arrangements, the volume of working hours, expectations and demands from employers or clients, the geographical proximity between residence and work place. Personal conditions play a role, like having a family, other commitments or the age and health condition of the person. Finally, preferences about an adequate work-life-balance can be quite different.</p> <p>This indicator tries to give an overall assessment of work-life-balance by asking persons in employment for their self-assessment. This is necessarily subjective. But as described above only subjective measure can inform us appropriately about this because objectively identical situations can be evaluated individually quite differently.</p>
<b>Formula</b>	<p>Persons in employment who responded positively on a scale on the question how well their work goes along with their commitments outside work.</p> $\frac{\textit{Employed persons for who work and other commitments go along well}}{\textit{Employed persons}} \times 100$
<b>Concepts and definitions</b>	<p><i>Evaluation of work-life-balance</i>: is the respondents' self-assessment of the reconciliation between their work and other private commitments. The self-assessment can be made on a scale with varying gradations ranging from a very good to a very bad evaluation. As positive assessment all persons who chose an at least somewhat positive point on the scale should be counted.</p> <p><i>Employed persons (age 15+)</i>: Employment is defined according to the resolution of the 19th ICLS in 2013 (see glossary).</p>
<b>Recommended data source(s)</b>	<p>A <i>Labour Force Survey</i> can be recommended if it also allows for subjective questions. Then it provides the opportunity to disaggregate by various employment and demographic variables. The EU-LFS normally avoids subjective questions as it allows for proxy interviews which can have substantial shares.</p> <p><i>Working Condition Surveys</i> can be recommended as they mostly include subjective aspect of work and still cover a wide range of employment and at least basic demographic characteristics. Their potential for breakdowns is mostly more limited as sample sizes are smaller than compared to usual LFSs.</p> <p>If none of the above is available also a general social survey can be an appropriate carrier.</p>
<b>Recommended metadata</b>	For this indicator, it is recommended that, as a minimum, metadata on the source (periodicity, breaks ins series, etc.), reference period and population coverage is provided. Breakdowns by component groups such as sex, status

<b>Short name</b>	<b>Self-perceived work-life-balance (3c8)</b>
	in employment, working hours or full-/part-time support the general assessment of the quality of the provided data.
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Sex</li> <li>• Age</li> <li>• Economic activity (ISIC)</li> <li>• Occupational group (ISCO)</li> <li>• Status in employment (ICSE-93)</li> <li>• Full-, part-time employment</li> <li>• Household type (single, couple without/with children etc.)</li> <li>• Number of children in household</li> </ul>
<b>Interpretation guidelines</b>	<p>This subjective measure of work-life-balance asks for the reconcilability of employment and private commitments. Respondents could still have the opinion that both aspects are not in balance even though they have found a way that they go along well with each other. Still, it can be expected that even if someone reduces private activities to make them fit with a high burden coming from the job, this would lead to a more negative answer for this indicator.</p> <p>For analysing this indicator, the various factors influencing satisfaction with work-life-balance mentioned in the measurement objectives can be taken under consideration. It can be expected that employed persons with children will have more problems in finding a good work-life-balance as persons with a demanding job and long working hours.</p>
<b>Relation to other indicators</b>	<p>This indicator as a subjective general assessment of work-life-balance has a relation to all indicators in dimension 3. Long working hours, the flexibility or atypical work schedules have relevance for managing the work-life-balance as well as the existence of care responsibilities.</p> <p>This indicator can also be analysed vis-à-vis indicators from dimension 7 to see in how far good relationships with co-workers and supervisors (7a1 and 7a2), job autonomy (7b1), intrinsic reward (7b3) and organisational participation (7b5) are linked with the overall perception that work and private life go along well with each other.</p>
<b>International comparisons</b>	<p>For each indicator to be comparable across time and countries, it is crucial that countries use similar concepts and methods in their calculation.</p> <p>As this indicator is subjective the wording of the corresponding question and the size of the scale have an important influence on the answering behaviour. Ideally for comparing this indicator the underlying methodology should be identical.</p>
<b>Recommended calculation in the EU-LFS or other international surveys</b>	<p>A variable providing this information is part of the European Working Conditions Survey 2015.</p> <p><i>Q44. In general, how do your working hours fit in with your family or social commitments outside work?</i></p> <p>→ Share of respondents who answered in q44 "very well" or "well" (1 or 2) from all persons who gave an answer. For this question, all asked persons are employed.</p>

Short name	Self-perceived work-life-balance (3c8)
<b>Further readings</b>	<p data-bbox="458 219 1302 320">European Commission, 2009: Flexible working time arrangements and gender equality, European Commission. Available at:  <a href="http://ec.europa.eu/social/BlobServlet?docId=6182&amp;langId=en">http://ec.europa.eu/social/BlobServlet?docId=6182&amp;langId=en</a></p> <p data-bbox="458 331 1350 470">Eurostat, 2009: Reconciliation between work, private and family life in the European Union. Available at:  <a href="http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-09-908/EN/KS-78-09-908-EN.PDF">http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-09-908/EN/KS-78-09-908-EN.PDF</a></p> <p data-bbox="458 481 1310 582">International Labour Office, 1999. Decent work, Report of the Director-General to the International Labour Conference, 87th Session, Geneva.</p> <p data-bbox="458 593 1369 732">International Labour Office, 2007: Decent working time - Balancing workers' needs with business requirements, Geneva,  <a href="http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_145391.pdf">http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_145391.pdf</a></p>

## Section 3

### Sub-dimension 7b: Work motivation

<b>Short name</b>	<b>Job satisfaction</b>
<b>Name</b>	Two versions: a) Average satisfaction for one's/main job (answers in scores) b) Percentage of employed persons who are very satisfied with their (main) job (answers in scores or in categories)
<b>Dimension and sub-dimension</b>	<b>7. Employment-related relationships and work motivation</b> a. Employment-related relationships <b>b. Work motivation</b>
<b>Description</b>	There is a strong relation between objective and subjective aspects about quality of work. Several studies have adopted subjective indicators to measure the overall quality of work. Job satisfaction captures how people feel about different aspects of their work. It is a subjective indicator linked to work motivation, well-being, health, and partially with productivity. A worker can have different feelings about the various aspects of its work. Facets are related one to another sometime modestly and sometime strongly. Therefore, it is important to consider the different aspects in connection with job satisfaction (see Italian LFS as example in section "concepts and definition").
<b>Measurement objectives</b>	The objective of the indicator is to estimate the average satisfaction for the current work (main job) on the basis of the own perception, taking into account different aspects of job satisfaction if this information is available. This indicator is expected to have a direct (positive or negative) effect on workers' well-being and health. Considering the various aspects of job satisfaction, it is possible to find out which elements of work produce satisfaction or dissatisfaction in order to get a more complete picture. If more variables are not available the use of one general variable on job satisfaction is a good proxy. In addition to the average value, it is important to analyse the different characteristics about the work and the workers. This allows to study inequalities between workers in terms of subjective well-being.
<b>Formula</b>	<b>Version a) Answer in scores:</b> <i>possibility 1) Average of scores (ex. score from 0 to 10)</i> <i>possibility 2) Number of employed persons with high score (scores 8-10)/ Total number of employed persons (scores 0-10) X 100</i>  <b>Version b) Answer in categories:</b> <i>Number of "very satisfied" employed persons / Total number of employed persons X 100</i>  <b>Method to reduce various variables into one index</b> If several aspects on work satisfaction are collected, it is possible to reduce them into one index variable using the following approaches: <b>Version a) Answer in scores:</b> ✓ <i>Unweighted mean of the variables</i>

	<p>Number of employed persons with high score in all questions (scores 8-10) as unweighted mean of the variables / Total number of employed persons (scores 0-10) X 100</p> <ul style="list-style-type: none"> <li>✓ <i>Multivariate analysis method (ex. Principal component analysis)</i></li> </ul> <p><b>Version b) Answer in categories:</b></p> <ul style="list-style-type: none"> <li>✓ <i>To convert the categories into scores and calculate an unweighted average</i></li> <li>✓ <i>Multivariate analysis method (ex. Multiple correspondence analysis)</i></li> </ul>
<p><b>Concepts and definitions</b></p>	<p>The variable should ask the respondent for his or her own perception about job satisfaction (main job). The indicator can be operationalized in many ways.</p> <p>The operationalisation of the variable varies in international surveys. Examples for survey questions measuring the variable include the following:</p> <ul style="list-style-type: none"> <li>• EWCS 2015 item Q88: “On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?”</li> <li>• The ISSP module on work organization 2015 item Q23: “How satisfied are you in your (main) job? Completely satisfied, Very satisfied, Fairly satisfied, Neither satisfied nor dissatisfied, Fairly dissatisfied, Very dissatisfied, Completely dissatisfied, Can’t choose”;</li> </ul> <p>Other examples regarding national survey, like the Italian LFS core questionnaire from 2013. The survey asks for satisfaction with several aspects, giving a score from 0 to 10, where 0 indicates “no satisfaction at all” and 10 “full satisfaction” :</p> <ul style="list-style-type: none"> <li>✓ current job</li> <li>✓ wage</li> <li>✓ social relationship</li> <li>✓ opportunities of career (employees)/ business and extend opportunities (self-employed)</li> <li>✓ number of working hours</li> <li>✓ job security</li> <li>✓ type of job</li> <li>✓ distances and times of journey</li> <li>✓ How much is interesting the work you are doing?</li> </ul> <p><i>Employed persons (age 15+):</i> Employment is defined according to the resolution of the 19th ICLS in 2013.</p> <p><i>Note:</i> this question could be asked to all those in employment, including both employees and self-employed.</p>
<p><b>Recommended data source(s)</b></p>	<p>Data on job satisfaction has to be collected in official household or population surveys, e.g. Labour Force Survey (LFS) or survey on income and living conditions, like the EU-LFS 2014 module on the labour market situation of migrants, the 2017 EU-LFS module on self-employment and the 2018 EU-SILC module on material deprivation, well-being and housing difficulties.</p>

	<p>The information is partially (only one general question) available in European Working Conditions Survey (EWCS) and in ISSP module. Nevertheless, attention should be paid when analysing the data as the sample survey size is small.</p>
<b>Recommended metadata</b>	<p>Data on the source, reference period, population coverage and geographic coverage, the definition and operational definitions (item of questionnaire) of job satisfaction.</p> <p>With regard to the comparability of the variable, specific attention shall be given to the question wording and scale of measurement. Furthermore, in case of combination of more variables it is important to describe the method used for reducing to a single index of job satisfaction.</p>
<b>Recommended disaggregation</b>	<ul style="list-style-type: none"> <li>• Status in employment according to the ICSE-93</li> <li>• Employees with permanent/fixed-term contracts</li> <li>• Full-time vs. part time</li> <li>• Involuntary part time</li> <li>• Occupation (ISCO-08 major group 1)</li> <li>• Economic activity (ISIC/NACE)</li> <li>• Earning</li> <li>• Sex</li> <li>• Age group</li> <li>• Citizenship (national or non-national)</li> <li>• ISCED</li> <li>• Perception of insecurity in employment</li> <li>• Job tenure</li> </ul>
<b>Interpretation guidelines</b>	<p>The indicator is used as a measure of the extent to which respondents (employed persons) are satisfied with their work.</p> <p>Although the indicator has a certain degree of subjectivity, job satisfaction is expected to have potential (positive or negative) effect on workers' health and well-being.</p> <p>The attitudinal perspective has become the predominant in the study of job satisfaction (Spector).</p> <p>Considering the subjectivity of the indicator, it would be preferable that job satisfaction data should be for non-proxy only.</p>
<b>Relation to other indicators</b>	<p>For a comprehensive analysis of job satisfaction, the indicator should be analysed together with other indicators: perceived job security, involuntary part time, low pay, over qualification, fix-term contracts, relationships with co-workers and with supervisor.</p> <p>In relation to context indicators, it is important to consider employment rate.</p>
<b>International comparisons</b>	<p>Care should be taken into account when making international comparisons, since the sources, methods of data collection, worker coverage and classifications used will differ between countries. Differences in the structure of economic activities between countries should also be taken into consideration, as well as the sensitivity of subjective questions due to cultural differences among countries.</p>

<b>Recommended calculation in the EU-LFS or other international surveys</b>	Not applicable.
<b>Further readings</b>	<p data-bbox="453 338 1347 405">Eurofound, 2016: Sixth European Working Conditions Survey: overview report, Publications Office of the European Union, Luxembourg.</p> <p data-bbox="453 445 1270 512">ISTAT, Bes report 2017: equitable and sustainable well-being in Italy  <a href="https://www.istat.it/en/archivio/210706">https://www.istat.it/en/archivio/210706</a></p> <p data-bbox="453 553 1347 654">Niedhammer, I., Goldberg, M., Leclerc, A., et al, 1998: “Psychological factors at work and subsequent depressive symptoms in the Gazel cohort”, Scandinavian Journal of the Work Environment and Health, 24, 197-205.</p> <p data-bbox="453 694 1347 795">OECD, 2014: “How good is your job? A Framework for measuring and assessing job quality” in OECD Employment Outlook 2014, Paris: OECD Publishing.</p> <p data-bbox="453 835 1347 976">Pintaldi, F., Pontecorvo, M. E., Della Ratta, F., Tibaldi, M., Marzilli, E., 2013, <i>Measuring job satisfaction in Italian Labour force survey</i>, Workshop on the Labour force survey methodology, Poland 23-24 May.  <a href="http://stat.gov.pl/lfs2013/papers_and_presentations.htm">http://stat.gov.pl/lfs2013/papers_and_presentations.htm</a></p> <p data-bbox="453 1016 1347 1084">Spector, P. E., 1997, <i>Job Satisfaction: Application, Assessment, Causes, and Consequences</i>, Sage Publications (CA)</p>