



System of Quality of Employment Indicators in Spain

**Meeting on Measuring Quality of Employment
Geneva, 31 October - 2 November 2011**

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System of Quality of Employment Indicators

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1) Overview of tasks performed

We describe tasks performed to date to implement the System of Quality of Employment Indicators (SQEI) in Spain following conceptual framework agreed at the 5th Meeting UNECE/ILO/EUROSTAT held in October 2009.

This conceptual framework is structured into 7 dimensions (5 of which are divided into sub-dimensions, until 12) intending 'to reflect human needs that may be satisfied through employment' or, in other words, to reflect the various factors that sets, mainly from a perspective of the individual or worker, when an employment could be defined as 'of quality'.

The dimensions and sub-dimensions (in parentheses/brackets, number of representative indicators of each one) are the following:

1) Overview of tasks performed

- 1) **Safety and ethics of employment (12)**
 - a. **Safety at work (5)**
 - b. **Child labour and forced labour (6)**
 - c. **Fair treatment in employment (1 to 7)**
- 2) **Income and benefits from employment (8)**
 - a. **Income from employment (3)**
 - b. **Non-wage pecuniary benefits (5)**
- 3) **Working hours and balancing work and non-working life (12)**
 - a. **Working hours (5)**
 - b. **Working time arrangements (3)**
 - c. **Balancing work and non-working life (4)**
- 4) **Security of employment and social protection (7)**
 - a. **Security of employment (3)**
 - b. **Social protection (4)**
- 5) **Social dialogue (2)**
- 6) **Skills development and training (5)**

1) Overview of tasks performed

- 7) Working relationships and work motivation (9)
 - a. Workplace relationships (4)
 - b. Work motivation (5)

- The tasks to implement SQEI (carried out in General Direction of Labour Market Statistics of NSI) are developed under two criteria:

- * Try to achieve the maximum possible coverage in SQEI based on the availability of our statistical sources in Spanish Statistical System.
- * In every indicator of SQEI, to reach an operational definition as closer as possible, firstly according to proposed name or theoretical definition in SQEI and, also depending on our statistical source of reference, selected to obtain data of the relevant indicator.

1) Overview of tasks performed

- After the choice of statistical source, we have create a Working Database, consisting of series of results (usually annual) disaggregated according to the most relevant variables, mainly the representative variables of sub- dimension 1.c (Fair treatment in employment), such as sex, age groups, nationality, Autonomous Community –NUTS 2,
- Also, in order to a better understanding of context of each indicator, besides of literature related to the conceptual framework (mainly derived of 5th. MQE) we have compile another information (working papers, articles, reports, ...) related to the chosen statistical source (methodological characteristics) and/or relevant indicator and/or relevant dimension (and sub-dimension).
- We hope that this double (theoretical and empirical) perspective will allow a better interpretation of results, that will be stated₆ in future comments included in the Quality Profile.

1) Overview of tasks performed

- Upon completion of the indicators of all dimensions of SQEI, the Quality Profile will be prepared and the results published. We have planned following information to be included in the dissemination stage:
 - * *Time series* with the *final* results of all indicators of SQEI for which information was ultimately obtained.
 - * *Quality Profile*, an electronic version of the full comments to indicator figures, mainly aimed at specialist users.
 - * *Summary of results*, for the purpose of informing the general public.
 - * *Methodological documentation* of each indicator of SQEI.
 - Theoretical and operational definitions.
 - Statistical source used (name; nature; main characteristics; body; date of reference and/or periodicity; title, table and/or variables involved, ...).
 - Whatever another information deemed necessary according to the nature and characteristics of indicator.

1) Overview of tasks performed

- Table 1 (System of Quality of Employment Indicators. Dimensions 1 and 2) of Annex, shows yearly series of results, in a breakdown by sex, in 12 representative indicators of dimensions 1 (sub-dimension a) and 2, excluding indicator 1.a.4 (hazardous work) and those of sub-dimension 1.b on Child labour and forced labour.

(Indicators of 1.b have been ignored, as it is not considered relevant to Spain, according to 2nd. Main Principle: 'Each aspect of quality of employment should be sufficiently problematic within a country to justify measurement').

- Table 2 - Statistical Sources of SQEI (Dimensions 1 and 2) of Annex, shows the sources of reference in same indicators.

2) Suggestions

- The first (and general) suggestion concerns the name of each indicator of SQEI.

For labour statistics specialists and for a large number of indicators of SQEI, the simple name of each indicator, as currently established in the system, could be considered as its theoretical definition and also allows the formulation of relevant operational definition.

However, in some cases, such as those described later, the simple name of the indicator not necessarily or consistently refer to its operational definition.

Hence, we consider it necessary to include in the available reference documentation on the SQEI, in addition to the current name, a theoretical definition of each of the system indicators that should be as detailed and descriptive as possible,

2) Suggestions

The aim of this suggestion is threefold:

- a) Facilitate, where possible, the formulation of the relevant operational definition.
- b) Minimize ambiguity in the interpretation of its theoretical definition.
- c) Help improve the future international comparability of its results.

- Specific suggestions to concrete indicators

Examples of the specific problems we can come across when attempting to obtain results because of the ambiguity – and even absence – of an operational definition, are the cases of following indicators of dimensions 1 and 2:

- * Indicator 1.a.4 (Hazardous work)
- * Indicator 1.a.5 (Significant stress)
- * Indicator 2.b.5 (Supplemental medical insurance plan)

Indicator 1.a.4 (Hazardous Work)

> **Theoretical definition:** Share of employed persons working in 'hazardous' industries and occupations (as defined by ILO).

- ILO's website: Programme on Safety and Health at Work and the Environment (SAFEWORK).
- *Hazardous Work (HW)*: 6th of the 11 areas of work of SAFEWORK.
- Primary focus of SAFEWORK (under premise 'certain sectors and occupations are more dangerous than others'): Protect workers in hazardous conditions, that is, in **3D (dirty, difficult and dangerous) jobs**.
- But (in order to reach an operational definition), the simple identification of Hazardous Work with 3D jobs (HW = 3D jobs) is too broad/vague/ambiguous/subjective, because will not allow an international comparability of results between countries (reason: leaves room for interpretation, because every country can decide/choose what occupations or industries / activities are considered as 3D jobs).

Indicator 1.a.4 (Hazardous Work)

- But, in the same context of HW of SAFEWORK, we dispose of *Hazard Datasheets on Occupations (HDO)*.
 - 72 HDO: alphabetical list and, also ordered by Major Groupings of ILO International Standar Classification of Occupations (ISCO-88).
 - Each HDO shows in a standar format (4 pages) different hazards related to the job (accident, physical, chemical, biological, ergonomic, psychosocial and organizational factors) to wich a worker, in the normal course of normal work, may be exposed to. Also it provides several measures for the prevention of occupational accidents and diseases (In summary, HDO: multipurpose information resource about hazards, risks and notions of prevention related to a specific occupation).
- Although these HDO ‘are intended for those professionally concerned with health and safety at work’, we can use them in a statistical way to try to reach an operational definition of our relevant indicator.

Indicator 1.a.4 (Hazardous Work)

> Operational definition (attempt)

An Occupation is defined as Hazardous (HO) if, and only if, ILO has developed (or has foreseen to develop in the future) the relevant Hazard Datasheet HDO.

Nowadays (72 HDO developed by ILO) that implies: Hazardous Occupation \Leftrightarrow Name of Occupation is equal of someone of 72 HDO title

Hazardous Occupation (72 HO) = 72 HDO's titles

- Next Step: codify the *72 Hazardous Occupations* according to a Classification of Occupations.
- Finally: calculation of Indicator 1.a.4:

$\% (HO) = (\text{Employed belonging of 72 codes} / \text{Total employed}) \times 100$

Indicator 1.a.4 (Hazardous Work)

- **Results**

Applying the proposed operational definition and using EAPS as statistical source (encoding HO to 3 digits) we have obtained *draf data*. In year 2010, values are 26,0 % (29,9% men, 21,0% women) remaining quite stable along all period 2005-2010 considered.

Data overestimated/NOT admissible, because not reflect the true weight of hazardous work in terms established of ILO definition (3D jobs). Even the amount of overestimation could be higher (some HO, as miner/mining that could be considered as 3D job, has not HDO yet).

Reasons/problems: Encoding at minor group level (3 digits) include occupations NOT hazardous. Also, very sensitive to a correct encoding (72 HDO are distributed in 43 codes).

Conclusion: If, in reason of its objectivity, this approach (based on HDO) is deemed useful, will be necessary to be modified (¿perhaps reducing/ selecting some HDO of 72, as more hazardous/dangerous than others?). In negative case, we should try to select another statistical source (and to reject the approach explained above).

Indicator 1.a.5 (Significant Stress)

> Theoretical definition: Share of employed persons who feel significant levels of stress on the job.

- ***Health Promotion and Well-Being in the Workplace:*** 8th area of work of SAFEWORK.
- **Aims:** prevention of addiction to alcohol and drugs, tobacco-free workplace, violence at work, HIV/AIDS and also psychosocial hazards and mental stress.
- **Mental Stress (at work)**

Derived of information in ILO's website related to psychosocial and mental stress, we have completed a simple model of work-related stress showing its context and its importance to health and well-being in the workplace.

(Figure 1 of Annex: Simple model of work-related stress)¹⁵

Indicator 1.a.5 (Significant Stress)

- **Operational problem** : define, in the more objective way possible, when can be considered as **'significant'** a level of stress.

Strategy adopted in Spain

- **Statistical sources**

We dispose of two sampling surveys:

- * **Quality of Life at Work Survey (QLWS) / Encuesta de Calidad de Vida en el Trabajo (ECVT)** carried out by Ministry of Labour and Immigration.
- * **National Health Survey (NHS) / Encuesta Nacional de Salud (ENSE)** that National Statistical Institute (NSI) carries out based on a collaboration agreement with the Ministry of Health and Social Policy.

1-) **Quality of Life at Work Survey (QLWS)**

Investigates labour situation of employed person, her family environment and their subjective perceptions related to labour conditions and relationships.

Indicator 1.a.5 (Significant Stress)

Besides of Average Level of General Working Satisfaction of employed and their distribution by several variables (sex, age groups, educational attainment level, professional status, occupation, time since person starting work, type of contract, full/part time distinction, level of income, atypical work (at night, shifts), section of activity, autonomous communities-NUTS 2, size of company and size of municipality), dissemination plan provides more Specific Working Subjective Perception related to :

- * Job's development, circumstances under tasks job are performed (autonomy/independence, monotonous-routine, stress, moral and sexual harrassement, discrimination, personal relationships in workplace, confidence in co-workers)
- * Characteristics of labour contract (salary, full/part time distinction, flexibility schedule, rest time, holidays, job stability, collective bargaining)
- * Health and labour safety (workplace physical conditions, prevent mesures of labour risks and hazards)
- * Working conditions (structure and aims of company, commuting time, trade union affiliation)
- * Occupational and educational formation
- * Labour and geographic movility
- * Work-family balance

Indicator 1.a.5 (Significant Stress)

1-) Quality of Life at Work Survey (QLWS) (continued)

Question (P.27):

Indicate/show/point out the level you feel in current job in relation to each of following characteristics:

1. Stress
2. *Monotonous-routine*
3. *Physical effort*

Answer:

Use a ranged 0 (null/notingh of stress) to 10 (very high/very much) scale (Likert scale of 11 points).

Results of Stress (Table 2 of Annex)

* Dissemination plan of QLWS provides a table showing figures of Average level of stress and of the percentage distribution of employed according to a breakdown in 5 categories of level of stress by several variables.

Indicator 1.a.5 (Significant Stress)

1-) Quality of Life at Work Survey (QLWS) (concluded)

- * 5 categories are the following:
- Very low (0,1) - High (7,8)
 - Low (2,3) - Very high (9,10)
 - Middle (4,5,6)

* In our *Working Database* we dispose of yearly series of results of period 2006-2010. Provisionally we have used as:

- Significant : [High + Very high] (7 to 10)
- Very significant : Very high (9,10)

* Results are showed in Tabla 3 of Annex

Indicator 1.a.5.- Share of employed who feel significant (and very significant) level of stress on the job.

Indicator 1.a.5 (Significant Stress)

2-) National Health Survey of Spain (NHSS)

Section *F. Mental Health and labour stress*

Composed by 3 questions addressed to:

- * Detect psiquic disorders by means of GHQ12 (short/abbreviated form of 12 items of General Health Questionnaire, that investigate issues as: capability of to concentrate, to take decisions, to enjoy whit normal daily activities; lost of time due to worries, lost of self-confidence, happiness, depression, and so on)
- * Job satisfaction
- * Work-related stress

Question (stress)

Globally and considering conditions of you carry out his/her work, indicate/show/point out his/her level of stress on it, according to a ranged scale from 1 (nothing stressed) to 7 (very much stressed).

Indicator 1.a.5 (Significant Stress)

- Comparison of sources

We dispose of two sources (QLWS and NHSS-2006) with questions (about stress) formulated in a same/similar way, but respondents report their stress levels by rating them on a Likert scale that ranges from 0 to 10 (in QLWS) and from 1 to 7 (in NHSS-2006).

Level of stress on the job (employed)

	QLWS-2006			NHSS-2006			
	Average	7-10	9-10	Average	5-7	6-7	7
Total	5.6	47.2	18.6	4.18	43.7	21.2	8.8
Men	5.5	45.8	17.0	4.17	43.4	20.9	8.4
Women	5.8	49.5	21.1	4.18	44.1	21.7	9.5

Obviously, in both sources the figures of percentages of this table are depending on the chosen interval values derived of Likert scales. But the main fact to be considered is the difference in average level of stress, that suggest (to avoid misinterpretations on comparability of data) it is necessary to add the range used on the response's scale to the information related to values chosen to define *significant* stress.

Indicator 1.a.5 (Significant Stress)

> Operational definition

According to the approach explained previously, the steps to obtain results (using QLWS as statistical source) of this indicator are:

- Choose range (7-10, 8-10, 9-10, 10) of response's scale to define when a level of stress can be considered as *significant*. This information must be added to table(s) and comments of results included of Quality Profile (e.g. we consider significant a level of stress from 8 to 10 in a ranged scale from 0 (null) to 10 (very much))

- Finally: calculation of Indicator 1.a.5:

$\% \text{ (E.S.S.)} = (\text{Employed (i.g. 8-10 stress)} / \text{Total employed}) \times 100$

Statistical source: Quality of Life at Work Survey (QLWS)

Indicator 1.a.5 (Significant Stress)

Reasons of preference (for this indicator 1.a.5)

QLWS >> LFS-2007 ad hoc module

(See also Figure 2 of Annex)

- * Reference period: Past 12 months (from the date of the interview) in LFS-2007 ad hoc module; Current date (previous week) in QLWS.
- * Question. In LFS-2007 ad-hoc module is wider/ broader (because mental well-being can include more psychological disorders than stress) and neither directly addressed to investigate stress nor its *significance* (level of stress):
Whether at the workplace the person has particularly exposure to selected factors (mainly harassment or bullying; violence or threat of violence; time pressure or overload of work) that can adversely affect his/her mental well-being.
- * Periodicity of results. Next EU-LFS ad hoc module on accidents at work and other work-related health problems is planned to 2013. In QLWS we dispose of data in continuous yearly basis, that permit a better analysis of evolution.

Indicator 1.a.5 (Significant Stress)

- **Issues to be addressed**

- If this approach is deemed useful, only issue to be solved is to take a decision about the term 'significant' in terms of the Likert scale used.

But the choice have to consider some issues of diferente nature as:

- * Degree of stress that could be dangereous to health, that is, could be produce a serious problem of health in people severely affected, according to intensity and/or frequence of stress (safety at work perspective).
 - * Try to achieve a major degree of comparabilty international of data, in case that countries dispose of statistical source and question ranged in a Likert scale (statistical perspective).

According to first issue (related more directly with Safety at work), we suggest ranges (8 to10), (9 to 10) or even 10, of scale.

But, from a statistical point of view, the choice of maximum value (5, 7, 9 or 10, depending of the ranged scale used) can minimize the possible *scale effect* (above explained in QLWS and NHSS- 2006 comparation) and consequently increase the comparability international of data in this indicator.

Indicator 1.a.5 (Significant Stress)

- **Issues to be addressed** (concluded)
 - Finally, to aid to the choice of *significant* range of scale, we show a table comparing LFS-2007 ad hoc module data (% of workers who are exposed to factors affecting mental well-being) in Spain and EU-27, and QLWS (stress).

QLWS (stress) and LFS-2007 ad hoc module (mental well-being)

	QLWS-2007		LFS-2007 ad hoc module	
	7-10	9-10	Spain	EU-27
Total	44.4	17.2	25.6	26,8
Men	44.6	16.6	26.7	27.0
Women	44.3	18.1	24.0	26.5

(NOTE: If the aim is to investigate stress, we repeat again that LFS-2007 ad hoc module is mainly focused to a limited factors/conditions (harassment or bullying, violence or threat of violence; time pressure or overload of work) affecting mental well-being (stress, depression or anxiety), while QLWS is focused specifically to know subjective response of stress (whatever it is the reason), based in a ranged scale.)

Indicator 2.b.5 (Supplemental medical insurance)

> **Theoretical definition:** Share of employees with supplemental medical insurance plan

- **Source:** None statistical source can provide *directly* information, but National Health Survey of Spain (NSHH-2006) Section G. Use of medical services allows an *indirect estimation* of results.
- **Question G.3 (Medical insurance)**
 - * Investigates specifically the various medical insurances (public and/or private) that respondent holds or is a beneficiary of.
 - * Multiresponse modality: maximum of 2 responses, chosen by priority of respondent.
- **Supplemental:** We have consider a medical insurance plan to be supplemental when it is taken out privately by an individual (either as holder or beneficiary thereof) who already has medical insurance for the simple fact of being employee (because all employees in Spain are entitled to medical coverage).

Indicator 2.b.5 (Supplemental medical insurance)

> Operational definition

- Numerator:

Number of employees under following 2 restrictions:

- * Maximum of responses allowed in G.3 (Number of responses = 2).
- * Prior pattern of response (exactly 2) combined in following codes:
 - Code 5. Private medical insurance taken out individual (as holder or beneficiary)
and simultaneously someone another code of
 - Codes 1 to 4 (Public Health) or Code 6 (Private Health).

- Denominator:

Number of employees (also obtained from National Health Survey of Spain (NHSS-2006)).

- Calculation of Indicator 2.b.5:

$$\% \text{ (SMI)} = \left(\text{Employees under 2 restrictions} / \text{Total employees} \right) \times 100$$

Indicator 2.b.5 (Supplemental medical insurance)

- Comment (to term *supplemental*)

Although interpretation of the definition that we have used seems to be the most reasonable one, the proposed title of indicator 2.b.5 in SQEI should nonetheless include a clarification on this matter.

- Results

Using the operational definition explained, we have obtained data (showed in Table 4 of Annex) derived of NHSS-2006.

Indicator 2.b.5

Table 4. Share of employed with supplemental medical insurance plan.

3) Conclusions

- * **We agree with the assumption that conceptual framework of SQEI, structured in the proposed 7 dimensions and 12 sub-dimensions, allows an integrative, comprehensive and logical approach to the various factors that any worker (mainly in the individual perspective and in spite of the variability of responses to this issue) would take into account to define a job as of quality.**
- * **In spite of flexibility in the initial stages of the project, we consider it is convenient/necessary a bigger/deeper methodological development to reach theoretical and/or operational definitions in SQEI (mainly in some indicators) to minimize, as much as possible, the degree of subjectivity on its interpretation, with a view of future international comparability of data between countries.**

3) Conclusions

- * In pair *Indicators-Quality Profile*, we have focused our tasks in indicators (first component) under the premise expressed as follows:
- Higher number of indicators used (that is, higher coverage in SQEI), more objective definitions (theoretical and operational), more reliable results derived of consolidated statistical sources,
and also
 - Broader theoretical information of indicators and/or statistical source and/or dimensions (& sub-dimensions),
will produce
 - Richer, varied and more descriptive comments reflecting various aspects of quality of employment in our country, that is, the Quality Profile (second component).

In consequence, in addition to works developed in others countries, we hope that our approach will contribute to strengthen the SQEI.

System of Quality of Employment Indicators

Thank for your attention !