

Survey on Adult Population Involvement in Learning Activities 2011 (AES-11).

Methodological report

29 November 2012

**Subdirectorato General for
Sectoral Social Statistics
INE**

1. Introduction

2. Objectives of AES-11

3. Concepts and definitions

3.1. Criteria used to distinguish between formal, non-formal and informal education

3.1.1. Formal Education versus Non-Formal Education

3.1.2. Informal Education versus Formal and Non-Formal Education.

4. Survey scope

4.1. Population scope

4.2. Geographical scope

4.3. Time scope

5. Sample Design

5.1. Type of sampling

5.2. Sample size. Allocation

5.3. Sample selection

5.4. Estimators

5.5. Sampling errors

6. Information collection

6.1. Collection method

6.2. The basic documentation collected: the questionnaire

6.2.1. Cognitive pretests

6.2.2. The questionnaire

7. Tables published

7.1. Description

7.2. Derived variables.

ANNEXES

Annex 0. Classification of fields or sectors for Informal education and learning

Annex 1. Countries (list of ISO 3166 codes)

Annex 2. Statistical classification of economic activities to 2 and 3 digits (NACE Rev.2)

Annex 3. Uniform international classification of occupations to 2 digits (ISCO-88)

Annex 4. Educational levels

Annex 5. Languages

1. Introduction

Lifelong learning¹ this is the focus of the European political debate, since the European Union declared the year 1996 to be the "European year on lifelong learning," in such a way that, since then, it has become a horizontal objective of European employment strategy.

The European Council of Lisbon, of March 2000, entailed an inflection point. Lifelong learning was included in the conclusions of the said Council, as one of the key elements for reaching the strategic objective of making the European Union a more competitive and dynamic economic based on knowledge.

As a result, Eurostat proposed creating a European system of statistical information regarding the education of the adult population, based on three main sources:

- A use of administrative data regarding the regular education and training systems, including a joint UOE (UNESCO-OECD-EUROSTAT) questionnaire, which is currently extensively carried out.
- A survey targeting companies specialised in providing vocational training in companies [*Continuing Vocational Training Survey (CVTS)*].
- A household survey regarding adult involvement in learning, education and training activities: *Adult Education Survey (AES)*.

The AES is the European component of the production system of statistics regarding adult education, and the national version is the Survey on Adult Population Involvement in Learning Activities (AES).

The other two components of the production system of statistics regarding adult education are the Economically Active Population Survey (EAPS) and the Ongoing Vocational Training Survey (EFPC). The EAPS provides information on the annual performance of a limited set of indicators, whilst the EFPC provides data regarding the business activities for developing the abilities of employees.

¹ The English term *Lifelong Learning* is normally translated as *permanent learning* or *learning throughout the lifetime*. This project opts for the latter translation, though at times the other form is also mentioned. On the other hand, throughout the document, sometimes the terms *education* and *learning* are used interchangeably. According to the Royal Academy of Language, *education* is defined as the action or effect of educating, and also as instruction through a teaching action. Educate is a transitive verb (one educates someone). *Learning* is defined as the action and the effect of learning, defined as acquiring knowledge of something through study or experience. Though the two concepts are quite similar, they are not synonyms, and therefore, it is preferable to use the learning term in this case, as it more precisely defines the target set of activities of study in this research

2. Objectives of AES-11.

A goal of AES-11 is to obtain information regarding the learning activities carried out by the adult population during the 12 months prior to the interview, in approaching the lifelong learning phenomenon.

Therefore, the main objective of the survey is to measure the involvement of the adult population (aged 18 to 65 years old) in activities carried out with the intention of learning or acquiring some knowledge or ability. It intends to respond to the following questions:

- Who are the persons who learn?
- How are these persons involved in formal and non-formal education and in informal learning activities?
- How much time do they spend learning?
- Which are the characteristics of the educational and learning activities in which they have been involved?
- Which are the difficulties that these persons find for not being involved in educational and learning activities?
- Who pays for the learning activities?
- What part of the educational and learning activities is provided by the employers?

In short, trying to meet the political and social needs for information within the area of lifelong learning.

Knowledge regarding the involvement of adult persons in learning activities requires not only quantifying and classifying these activities, but also relating them with other aspects that enable a more efficient analysis, such as learning difficulties, accessibility of the information regarding learning opportunities, or even regarding involvement in cultural activities. Moreover, it is important to ascertain the characteristics and educational career of the population under study, in order to be able to use such information as a base on which to draw conclusions with regard to involvement in educational and learning activities.

In addition, this must mention the study that the survey proposes regarding linguistic knowledge being a single source for obtaining this information.

3. Concepts and definitions

Lifelong learning is defined as "any learning activity undertaken throughout life, for the purpose of improving or extending knowledge, abilities and skills, from a personal, civic, social and/or employment-related perspective."

Learning activities are defined as "those activities of an individual, organised with the intention of improving or extending her or his knowledge, abilities and skills". The two fundamental criteria for distinguishing learning activities from those that are not, for appropriate statistical processing, require verifying the following: a) the action must be **deliberate**, that is, the action must have the pre-established purpose of learning, and b) the action must be **organised** in order to reach said purpose in some way, including the possibility of being self-organised.

Deliberate learning is defined as a "deliberate search for knowledge, abilities, skills or attitudes with permanent value." The crucial criterion is therefore the intention of learning, formulated prior to the student or other individual beginning the activity.

Organised learning is "that which is planned, according to a pattern or sequence with explicit or implicit objectives." This requires a providing agent (person or persons or body) that establishes the learning environment and a teaching method through which the communication is organised.

Learning activities may be classified in the four following categories: formal education, non-formal education, informal learning and complementary/chance learning.

If bearing in mind the definition of learning activities adopted herein, chance learning must be excluded from the statistical observation and from the scope of the classification of learning activities and from the Survey, since it is not deliberate. Therefore, the research scope is reduced to the first three categories.

- FORMAL EDUCATION
- NON-FORMAL EDUCATION
- INFORMAL LEARNING

The definitions currently used for these large categories are the following:

Formal education is defined as "that education provided in the system of primary schools, secondary schools, universities and other formal education institutions that normally comprise an ongoing ladder of full-time education for children and young persons, which generally begins at 5-7 years of age and continues until the person reaches 20-25 years of age. In some countries, the highest parts of this ladder are organised as programmes that include part-time work and part-time involvement in the regulated school and university system:

such programmes are usually known as the "dual system" or in equivalent terms in such countries."

Non-formal education. This is defined as "those organised and sustained educational activities that do not correspond exactly with the aforementioned definition of formal learning. Non-formal learning may therefore take place both inside and outside of the educational institutions, and serve persons of all ages. This may cover educational programmes for adult literacy, basic extracurricular education, tools for daily living, work tools and general culture. Non-formal learning programmes need not necessarily follow the educational system ladder, and may have a different duration." Non-formal educational activities may be classified as follows:

- Private classes or courses (classroom instruction, conferences or theoretical and practical courses): A course is defined as "a planned series of individual learning activities relating to a specific subject and provided by a same entity." The courses are taught by one or more persons specialised in the field(s) of education and training.

These may take place in one or more environments:

- through classroom teaching (including conferences): This includes organised classroom learning for a group of persons, and is based on the transfer of knowledge from a teacher/tutor with the intention of educating.
 - Combination of theoretical/practical (workshops) courses, that is, including all those courses that combine classroom teaching (theoretical) with practical teaching in real or simulated situations.
 - Courses undertaken through open and distance education (defined below)
 - Private classes: a planned series of learning experiences offered by experts or other persons acting as such, selected in order to pursue greater depth of knowledge or abilities, so as to learn with greater intensity, and generally carried out by only one or very few students. In this case, the tutor (individual) is typically the "provider" and has education as her/his main activity.
- Courses through open and distance education: This includes those courses that are similar to classroom courses, that is, they may have elements such as registration, tutorials and exams, but they take place by correspondence or electronic means, and which link instructors and students, who are not together in a classroom. This type of course implies interaction between the instructor and the student, though not simultaneously, and with a certain delay
 - Sessions that combine theoretical teaching with practical training provided during a conference or congress
 - Aimed at preparation for a job post: This type of learning is characterised by expected periods of training, instruction or practical experience, using normal working tools, whether in the immediate workplace or in a simulated working situation in the presence of a tutor. In general, organised by the businessperson in order to enable the

adaptation of the personnel, even in situations involving transfer, re-contract and seasonal situations in their current or new job posts. This may include general training regarding the company (organisation, operational procedures, etc.), as well as specific work instructions (safety and hygiene, work practices).

Remarks:

In the case of private classes, if the intention of the teacher or tutor is to help the student within the framework of a social or family relationship, this must be considered information learning. Private classes may even be "formal education" in the case that the national education system recognises home schooling, then as the student participates in the institutional learning that leads to a qualification within the National Qualification Framework (MNC), this may be classified as Formal Education.

Informal learning is defined as "... deliberate, but less organised and less structured, and may include learning events (activities) taking place in the family, in the workplace, and in the daily life of every person."

Classification:

- Learning from a relative, friend or work colleague, that is, the lessons provided by members of the household or other persons, such as relatives, acquaintances or neighbours.
- The use of printed materials (books, professional magazines, etc.), that is, studying a subject with books, magazines, etc.
- The use of computers (online or without an Internet connection), for example, using online learning material
- Through television/radio/video, for example, watching a documentary on television or listening to a foreign language on the radio in the car

3.1 Criteria used to distinguish between formal, non-formal and informal education

There is a series of operative criteria used to distinguish between the large categories of learning activities, in accordance with their conceptual definitions. These are described below:

3.1.1 Formal Education versus Non-Formal Education

Formal and Non-formal learning are both included in the education framework. The essential criterion that distinguishes Formal education from Non-Formal education is as follows: if the learning activity leads to attaining a qualification included in the *National Qualification Framework*, it is considered to be a formal activity, and if it does not lead to such qualification, it is considered non-formal.

The National Qualification Framework (MNC) is defined as "the sole national and internationally accepted register through which all of the

learning achievements may be measured and related coherently, and which defines the relationship between all of the education and training qualifications and accrediting diplomas." Customarily, the MNC takes the form of a regulatory provision that stipulates the qualifications in a hierarchical manner, as well as the bodies that grant or recognise the qualifications.

In practice, as in the case of Spain, it is agreed to adopt the listing of qualifications stated by Mapping-UOE (UNESCO/OECD/EUROSTAT) as the MNC, both if the said qualifications are issued by Spanish authorities and if they are foreign qualifications validated by the national authorities, understanding this to be the best approximation.

Within the MNC concept, we can bear in mind several criteria for distinguishing between Formal Education and Non-Formal Education activities:

- "Level hierarchy" criterion: This is based on the definition in the International Standard Classification of Education (ISCE), according to which a formal learning activity may be viewed as a "ladder" of the education requiring the successful completion of a degree level prior to passing to the following level.
- Admission Requirements: These generally refer to the age and previous educational level for admission to a Formal Education activity, whereas those requirements may not exist for admission to a Non-Formal Education activity.
- Registration Requirements: a Formal Education activity usually entails registration, that is, it demands a set of requirements that must be registered formally for enrolment in the activity. On the other hand, there is no need for such requirement in Non-Formal Education

3.1.2 Informal Learning as compared with Formal and Non-Formal Education.

A learning activity is considered to be informal when it is not institutionalised, that is, it is less structured and may take place almost anywhere: in the family, with friends, at work or even using services provided by education and training providers.

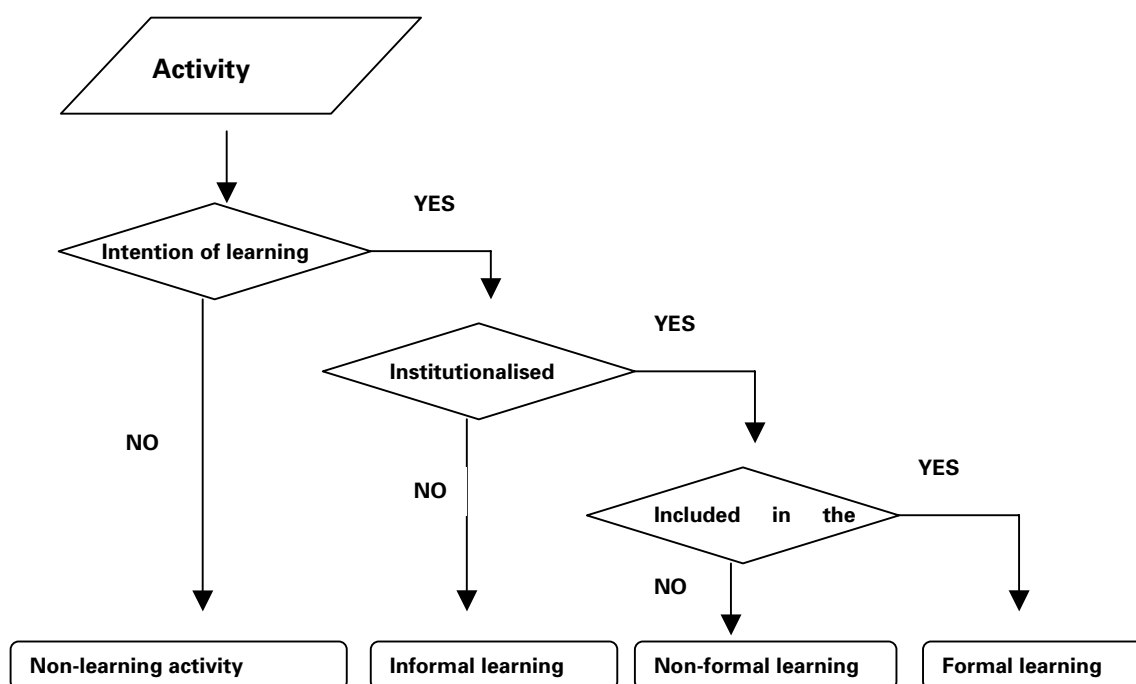
A learning activity is *institutionalised* when there is "an organisation that provides structured measures (which must include a teacher-student relationship) especially designed for education and learning."

Learning activities are institutionalised when the body/organisation that provides the activity is in charge of determining the following points, at least:

- the learning method (predetermined)
- the learning calendar
- the admission conditions
- the location of the learning installation

One simple, clear and intelligible way of expressing the criteria that must be used when making a decision regarding the assignation of learning activities to the three large categories is presented in the following diagram.

Figure 1: Assignation of education and learning activities, according to the 3 large categories



4. Survey scope

4.1 Population scope

The *population scope* of the survey comprises those persons aged 18 to 65 years old, inclusive, living in family households. Those persons of said ages resident in institutions or group establishments are excluded.

4.2 Geographical scope

The *territorial scope* is the entire Spanish territory.

4.3 Time scope

The reference period or *time scope* for studying the involvement in training activities considered to be the most convenient has been one year, considering the twelve months prior to the interview.

The expected collection period is the last four months of 2011.

5. Sample Design

5.1 Type of sampling

The type of sampling used is a stratified two-stage sampling. The first-stage units are the census sections. The second-stage units are those persons aged 18 to 64 years old, inclusive, with their regular residence in the main dwellings in the section.

The framework for the sample selection is a framework of areas comprising the listing of existing census sections with reference to 1 February 2011. For the second-stage units, this uses the listing of persons in each one of the sections selected for the sample.

The stratification criterion used is the size of the municipality to which the section belongs, as well as the main socio-demographic characteristics thereof.

The strata considered are the following:

Stratum 0: Municipalities with more than 500,000 inhabitants

Stratum 1: Remaining capitals

Stratum 2: Non-capital municipalities with more than 100,000 inhabitants

Stratum 3: Municipalities with 50,000 to 100,000 inhabitants

Stratum 4: Municipalities with 20,000 to 50,000 inhabitants

Stratum 5: Municipalities with 10,000 to 20,000 inhabitants

Strata 6: Municipalities with fewer than 10,000 inhabitants

For each Autonomous Community, an independent sample is designed representing it, due to the fact that providing data at this breakdown level is one of the objectives of the survey.

5.2 Sample size. Allocation

In order to cover the survey objectives of being able to provide estimates with a certain degree of reliability on a national level and by Autonomous Community, a sample of 32,000 persons distributed throughout 2,000 census sections has been selected. There are 16 persons selected in each census section (in Ceuta and Melilla, due to the small number of sections available from the framework, half of the sections have been selected, and twice as many persons, 32, have been selected per section, in order to maintain the sample size of persons).

The size of the theoretical sample was established at approximately **20,000 persons**.

For this survey, in accordance with international recommendations, it was decided not to carry out replacements in the incumbent units selected, and therefore, in order to reach the theoretical size, this has considered the results of the fieldwork obtained in the 2007 survey, and due to which the objective theoretical sample of the survey has increased 60 percent. This has led to the final size reaching **32,000¹ persons**.

The sample is distributed among Autonomous Communities, assigned one uniform part and another part proportional to the size of the Autonomous Community, obtaining the distribution shown in the following table.

Distribution of the incumbent sample, by Autonomous Community and stratum

	Strata							Total
	0	1	2	3	4	5	6	
Total	4,208	6,704	2,848	2,928	4,896	3,536	6,880	32,000
Autonomous Community								
ANDALUCÍA	640	560	304	624	704	496	800	4,128
ARAGON	656	80	.	.	.	160	368	1,264
ASTURIAS, PRINCIPADO DE	.	256	304	144	112	192	144	1,152
BALEARS, ILLES	.	432	.	64	368	144	176	1,184
CANARIAS	.	464	192	208	416	176	160	1,616
CANTABRIA	.	288	.	96	144	128	304	960
CASTILLA Y LEON	.	736	.	.	160	96	720	1,712
CASTILLA-LA MANCHA	.	352	.	112	176	240	672	1,552
CATALUÑA	800	192	640	416	624	416	688	3,776
COMUNITAT VALENCIANA	432	288	176	368	752	288	480	2,784
EXTREMADURA	.	272	.	64	144	112	544	1,136
GALICIA	.	352	208	112	288	336	512	1,808
MADRID, COMUNIDAD DE	1,680	.	832	400	208	128	192	3,440
MURCIA, REGION DE	.	400	192	144	336	176	64	1,312
NAVARRA, COMUNIDAD FORAL DE	.	288	.	.	96	144	432	960
PAIS VASCO	.	576	.	176	288	240	320	1,600
LA RIOJA	.	400	.	.	80	64	304	848
CEUTA	.	448	.	.	.	.	.	448
MELILLA	.	320	.	.	.	.	.	320

¹Due to problems occurring in the fieldwork, it was necessary to increase the theoretical sample, with the final size standing at 33,216 persons.

5.3 Sample selection

The sections are selected within each stratum, with a probability that is proportional to their size, understanding this to be the number of persons aged 18 to 64 years old. In each section, the persons are selected with the same probability, through systematic random-start sampling. This procedure leads to self-weighted samples in each stratum.

5.4 Estimators

In order to estimate all of the characteristics in the sample, ratio estimators have been used, and to which calibration techniques have been applied, taking auxiliary variables of the age groups and sex of the population of the Autonomous Community and nationality (Spanish and foreign).

To this end, the following steps have been followed:

1.- Obtaining of the **estimator based on the design**.

$$\hat{Y}_d = \sum_h \sum_{i,j \in h} \frac{1}{K_h \cdot \frac{P_h^{(11)}}{16}} \cdot y_{hij} = \sum_h \sum_{i,j \in h} \frac{P_h^{(11)}}{p_h^t} \cdot y_{hij}$$

where:

h: Stratum

i: Section

j: Person

K_h : Number of sample sections in stratum h

$P_h^{(11)}$: Number of persons from stratum h according to the 2011 framework

Y: Target variable

$p_h^t = 16 \cdot K_h$ Theoretical population sampling from stratum h. In Ceuta and Melilla this is multiplied by 32 and not by 16.

2.- **Correction of non-response**. This aspect is corrected by multiplying the aforementioned raising factor $\frac{P_h^{(11)}}{p_h^t}$ by the opposite of the probability of response in the stratum, that is to say:

$$\hat{Y}_2 = \sum_h \sum_{i,j \in h} \frac{P_h^{(11)}}{p_h^t} \cdot \frac{p_h^t}{p_h^e} y_{hij} = \sum_h \sum_{i,j \in h} \frac{P_h^{(11)}}{p_h^e} \cdot y_{hij} = \sum_h \sum_{i,j \in h} w_{hij}^{(2)} \cdot y_{hij}$$

where p_h^e is the actual sample of persons in stratum h.

3.- **Ratio estimator**, using the projection of the population at the time of the survey as the auxiliary variable. Its fundamental aim is to improve the estimator obtained via the previous steps, updating the population employed when selecting the sample to the moment when the survey is conducted. It is expressed as:

$$\hat{Y}_3 = \sum_h \frac{\sum_{i,j \in h} \frac{P_h^{(11)}}{p_h^e} \cdot y_{hij}}{\sum_{i,j \in h} \frac{P_h^{(11)}}{p_h^e} \cdot p_{hij}} \cdot P_h = \sum_h \sum_{i,j \in h} \frac{P_h^{(11)}}{p_h^e} \cdot y_{hij} = \sum_h \sum_{i,j \in h} w_{hij}^{(3)} \cdot y_{hij}$$

where P_h is the population projection at the halfway point of the period of conducting the survey (November 2011) for stratum h.

4.- Lastly, this **calibrates** the previous factor in order to adjust the estimated distribution to the population distribution of persons, by Autonomous Community, age group and sex provided by the Demographic Projection Unit, to the population total (18 to 64 years old), by province and to the foreign population total (18 to 64 years old), by Autonomous Community. This calibration has been carried out by means of the CALMAR framework of the French National Statistics and Economic Studies Institute (INSEE). The following twenty groups have been considered: Men and Women aged 25 to 29, 30 to 34, 35 to 39, 40 to 44, 45 to 49, 50 to 54, 55 to 59, 60 to 64, 65 to 69 and 70 to 74 years old. In Ceuta and Melilla, due to the small sampling size, this is adjusted to the following ten groups: Men and Women aged 25 to 34, 35 to 44, 45 to 54, 55 to 64 and 65 to 74 years old.

After implementing the previous steps, a final elevation factor is obtained $w_{hij}^{(4)} = F_i$ for each one of the persons from the actual sample.

Thus, the estimator for the total \hat{Y} of a characteristic Y takes the following form:

$$\hat{Y} = \sum F_i y_i$$

where the sum is extended to all of the persons in the sample, y_i is the value of characteristic Y observed in individual i , and F_i is the final elevation factor of said individual.

The estimators of proportions $P = \frac{X}{Y}$ are of the form $\hat{P} = \frac{\hat{X}}{\hat{Y}}$ where estimates \hat{X} and \hat{Y} are obtained using the previous formula.

5.5. Sampling errors

For the calculation of the sampling errors, the Jack-knife Method has been applied, providing an estimation of the variation coefficient through the following expression:

$$CV(\hat{Y}) = \frac{\sqrt{\sum_h \frac{A_h - 1}{A_h} \left(\sum_{l \in h} (\hat{Y}_{(lh)} - \hat{Y})^2 \right)}}{\hat{Y}}$$

where $\hat{Y}_{(lh)}$ is the estimator obtained by removing the group of sections l from stratum h .

In order to obtain the estimator $\hat{Y}_{(lh)}$, and seeking simplicity, rather than recalculating the elevation factors, this multiplies the factors of the stratum where the sections have been removed, by factor: $\frac{n_h}{n_h - \#(lh)}$.

In accordance with the above:

$$\hat{Y}_{(lh)} = \sum_{i \notin h} F_i y_i + \sum_{\substack{i \in h \\ i \notin lh}} F_i \frac{n_h}{n_h - \#(lh)} y_i$$

where:

lh is the group of sections from stratum h

n_h is the total sections from stratum h

A_h are the groups of sections from stratum h

$\#(l)$ is the number of sections from group l

6. Information collection

6.1 Collection method

The collection method is mainly the computer-assisted personal interview (CAPI) of the selected person. The interviewer will visit the dwelling and ask for the information necessary for filling out the electronic questionnaire. The interview will be completed, if necessary, with telephone calls to complete omitted data or to correct erroneous data.

"Proxy" interviews (in which another person provides the data on the selected person) are not accepted, but it is accepted in the case of the incapacity of the selected person that another person may help her/him to give the information.

6.2 The basic documentation collected: the questionnaire

For the preparation of the questions integrating the AES 2011 questionnaire, the experience and knowledge acquired with the pilot survey prepared in 2006 was used, and moreover, a study based on so-called certain cognitive pretest procedures was carried out, as described below.

6.2.1 Cognitive pretests

The procedures grouped under the "cognitive pretest" name intend to provide evidence regarding the traditionally so-called "non-sampling errors", and within this category, mainly regarding the "measurement errors."

The "cognitive pretest" label groups a whole set of specific procedures. The following lists, in a very simplified way, the main types of evidence that each one of them may provide more specifically:

- ⇒ **Cognitive interviews:** Direct evidence regarding the development of the different phases of the "question-and-answer" process implemented by the surveyed persons. This provides information regarding problems in comprehending key terms, errors in the recovery of the information, errors in the preparation of the answer and gap in the election of the answer option expected by the authors of the questionnaires.
- ⇒ **Behaviour encoding:** Identification of "problematic" questions for the interviewer and/or interviewee using the register of behavioural indicators during the "question-and-answer" process: for example, incomplete reading of the question by the interviewer, or interviewee request to repeat the question.
- ⇒ **Discussion groups with "surveyable persons":** Perspective and contents of the "role" of survey participants; knowledge and comprehension of the most general concepts; attributes regarding

the objective and purpose thereof; attitudes and degree of implication, etc.

The interaction between the potential sources of error necessitates the pretest design not only being covered considering the "target" questions (for example, the target questions of analysis in the cognitive interviews, but also considering the interview method, the design of the interview process and the specific characteristics of the interviewees.

Bearing in mind the possible sources of potential error, the "target" questions that have been the target of the cognitive pretest were identified.

Table 1 presents some "target" questions from the AES 2011 questionnaire

Table 1. Some "target" questions of the AES 2011 questionnaire and associated potential sources of error.

QUESTIONNAIRE	
QUESTION	SOURCE OF ERROR
P03 Which is the highest educational level that you have completed?	<ul style="list-style-type: none"> ▪ Gap with the official classification ▪ Interpretation of the "educational level completed" concept
P04 For which of the following studies did you pass the last academic year or which was your situation?	<ul style="list-style-type: none"> ▪ Difficulties in comprehending the terms that appear in the answer alternatives ▪ Gaps in matching their situation to the answer alternatives
P09 Which is the highest educational level that your father or guardian had completed when you were a teenager?	<ul style="list-style-type: none"> ▪ Problems in recovering the information ▪ Diversity in the interpretation of the "teenager" time reference ▪ Gaps in matching their answer to the answer alternatives
P11 During the last 12 months, have you studied or have you taken part in any educational activity leading to an official qualification?	<ul style="list-style-type: none"> ▪ Forgotten time reference ▪ Problems classifying educational activity ▪ Interpretation of the term "official qualification"
P15 In the last 12 months, have you undertaken or continued to undertake any course combining theory and practice (including workshops and seminars), a theoretical course, even not leading to an official qualification?	<ul style="list-style-type: none"> ▪ Forgotten time reference ▪ Interpretation of the key term "course combining theory and practice" ▪ Interpretation of the key term "official qualification"
P16 In the last 12 months, have you undertaken or continued to undertake	<ul style="list-style-type: none"> ▪ Forgotten time reference ▪ Interpretation of the key terms "theoretical course," "chat" or "conference"

QUESTIONNAIRE	
QUESTION	SOURCE OF ERROR
any course combining theory and practice, or have you attended any talk or conference?	
P17 In the last 12 months, have you been involved or been involved in any practical activity aimed at preparing for a job post (both in your current job and for a new job)?	<ul style="list-style-type: none"> ▪ Forgotten time reference ▪ Interpretation of key term "practical activity aimed at preparing for a job post" ▪ Recovery in memory by the use of two references (current job vs. new job)
P18 In the last 12 months, have you attended or are you attending private classes taught by a specialised teacher or in an academy?	<ul style="list-style-type: none"> ▪ Forgotten time reference ▪ Interpretation of the "private classes" and "specialised teacher" key terms
P23 In addition to the previous activities, in the last 12 months, have you carried out other activities with which you have deliberately intended to learn something on your own, with the help of a relative or friend, at work or in your free time?	<ul style="list-style-type: none"> ▪ Interpretation of the "activities" or "deliberately learn" key terms ▪ Forgotten time reference in the process of preparing the answer.

After carrying out this work, the main evidence obtained through the cognitive interview procedure and the discussion groups was presented.

Thus, for the preparation of the AES 2011 questionnaire, this considered the main evidence provided by the cognitive procedures and the recommendations supported by the pretest evidence.

6.2.2 The questionnaire.

The European AES questionnaire was initially prepared for the pilot AEs that was carried out during the 2005-2008 period. Its objective was to collect harmonised information regarding the involvement of persons in any type of learning activity (Formal, Non-Formal and Informal), as well as in activities related to work, time spent on education and training, social participation and cultural participation, the ICTs and the linguistic competence and variables relating to the main characteristics of the surveyed persons.

Based on the experience from the pilot AES, the questionnaire model was developed further to include all of the basic social variables¹, some questions regarding the measurement of competence and the results on education and training, whereas other questions were improved or considered for being excluded.

Countries are advised to adapt their questionnaire to the European questionnaire model, with the lower possible number of deviations, for the purpose of compiling comparable statistics on an EU level.

The European questionnaire has been adapted to the Spanish case, yielding the AES 2011 questionnaire, including some variables regarding the educational trajectory of persons, and excluding other parts that have already been included in other national studies.

The questionnaire model for AES 2011 mainly consists of 12 sections:

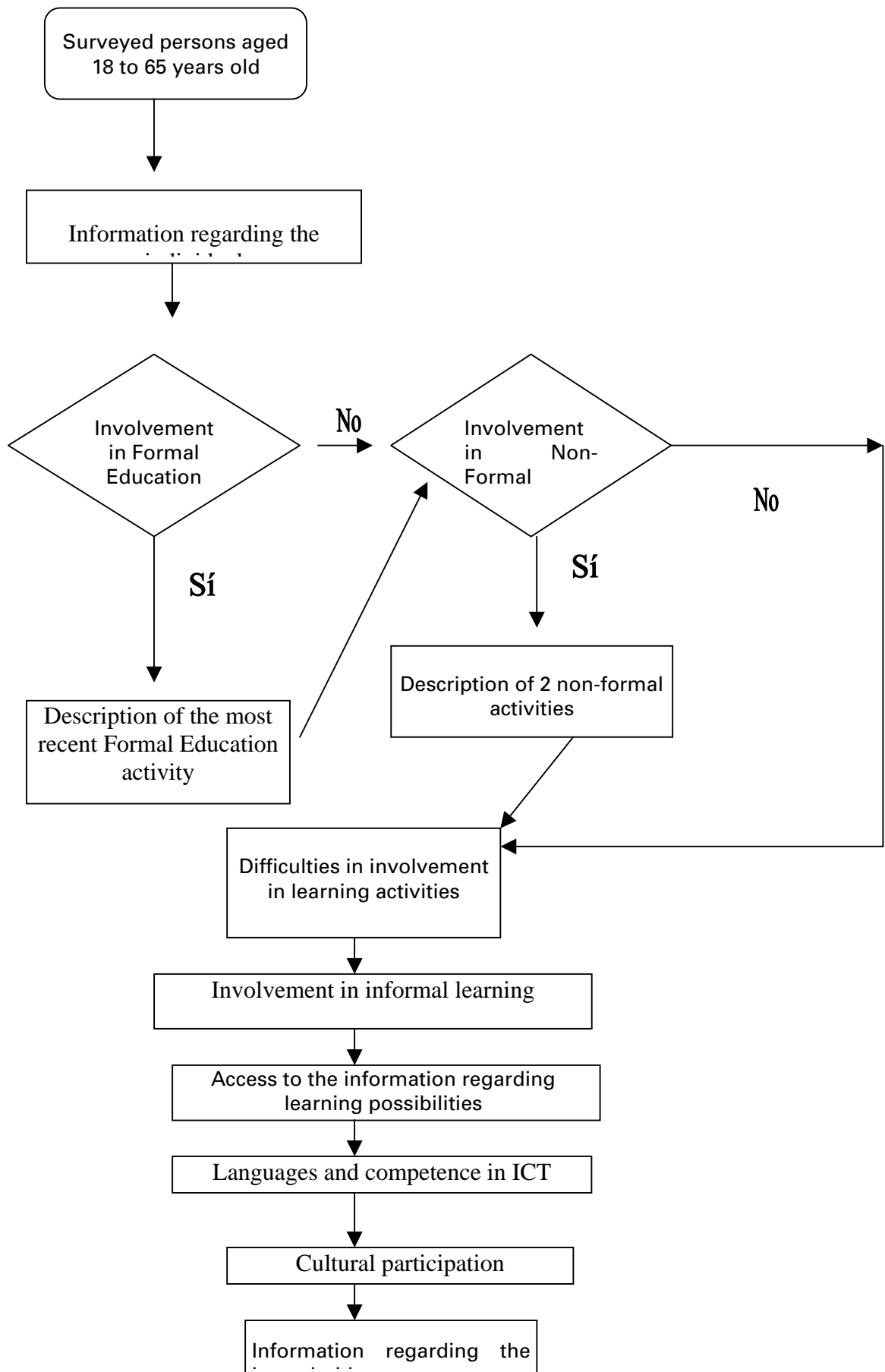
- Information regarding the individual
- Educational data on the person to be interviewed
- Involvement in education and training (Formal and Non-Formal Education)
- Difficulties in involvement in education
- Informal Learning
- Access to information regarding learning possibilities

Moreover, it covers questions on:

- Use of ICTs and linguistic competence
- Cultural Participation
- Information regarding the household in which the interviewed person resides

The following diagram illustrates the design structure of the AES 2011 questionnaire

¹ According to the latest report on nuclear social variables.



7. TABLES PUBLISHED.

7.1 Description

The tables included in the publication are structured as follows:

1. On the one hand, tables have been calculated with the information collected regarding the educational characteristics of adult persons (aged 18 to 65 years old), broken down into

Educational characteristics:

- Educational level of persons aged 18 to 65 years old (according to the different social factors of the individual)
- Educational content of their highest level studies

Study path of adult persons, that is,

- Persons aged 18 to 65 years old who completed their studies in another educational field other than that of the highest educational level attained (according to the different social factors of the individual)
- Persons aged 18 to 65 years old (with an educational level of the first stage of secondary, primary education or without studies) who repeated an academic year during their school stage (according to the different social factors of the individual)
- Persons aged 18 to 65 years old, according to the intention of studying education higher than their maximum educational level (according to the different social factors of the individual)

Intergenerational educational mobility, understood as educational intergenerational mobility. Moreover, tables are published regarding educational involvement, linguistic knowledge and reading habits, as compared with the highest educational level of the parents or guardians.

Education in line with the job post, defined as the adaptation between the educational level of the worker and that required by her/his job post. This section also includes a table that describes the extent to which the educational field is in line with the occupation, that is, there is a gap in the educational field when a person, at the time of the interview, is performing a job or occupation that is not related to the content of her/his highest level studies.

2. On the other hand, this includes the characteristics of the educational activities, according to whether they are Formal Education, Non-Formal Education or Informal Learning activities.

Tables were included regarding involvement in educational and learning activities, and characteristics of these activities (duration, expenses, educational results, etc.)

3. And lastly, the remaining characteristics included in the survey, that is, learning difficulties, ICT use, the search for information on learning possibilities, linguistic knowledge and involvement in cultural activities.

7.2. Derived variables that are used in compiling the tables:

AGE:

In order to calculate the age, and following Eurostat recommendations, the following formula is considered:

$AGE = \text{int}(((REFYEAR * 12 + REFMONTH) - (BIRTHYEAR * 12 + BIRTHMONTH)) / 12)$, where int() represents the entire part.

HIGHEST EDUCATIONAL LEVEL OF THEIR PARENTS:

Variable derived from the HATFATHER and HATMOTHER variables which will bear in mind the higher educational level between the father and the mother of the interviewee.

That is, HIGHEST EDUCATIONAL LEVEL OF THEIR PARENTS = max (HATFATHER, HATMOTHER)

CORRESPONDENCE BETWEEN THE EDUCATIONAL FIELD AND OCCUPATION:

It is understood that there is gap in the educational field when a person is performing a job or occupation that is not related to the educational content of her/his highest level studies.

This is the correspondence of the international classification of occupation codes and the educational fields or sectors considered, according to the ISCED-97 classification.

OCCUPATION code to 2 digits, according to ISCO-08	EDUCATIONAL SECTORS OR FIELDS, according to ISCED-97
23,33	"General programmes and Education programmes"
24,26,34,52,95	"Arts and humanities, and Foreign languages"
11,12,13,14,24,34,41,42,43,44	"Social sciences, commercial training and law"
25,31,35	"Science, mathematics and computer programming"
21,31,71,72,73,74,75,81,82,83,93	"Mechanics, electronics and other technical training; manufacturing industry and construction"
22,32,61,62,63,83,92,94	"Agriculture and veterinary medicine"
22,24,32,33,34,51,91	"Health and social services"
42,51,52,53,54,83,95,94,96	"Occupational services, safety and health"

REASONS FOR INVOLVEMENT:

The reasons for involvement in educational activities (Formal and Non-Formal) are as follows:

Variable	Values	Description
FEDREASON _01	1	If they select the following option: To do my work better and/or improve my professional possibilities
FEDREASON _02	1	If they select the following option: To decrease the possibility of losing my job
FEDREASON _03	1	If they select the following option: To increase my possibilities of getting a job or changing to another job or profession
FEDREASON _04.	1	To create my own business
FEDREASON _05.	.....	I was obligated to participate
FEDREASON _06.	.....	To acquire knowledge or techniques that are useful in everyday life
FEDREASON _07.	.....	To acquire knowledge or techniques in a subject that I find interesting
FEDREASON _08.	.....	To attain a certificate
FEDREASON _09.	.....	To meet new people / for fun

This could consider the following focuses or perspectives:

If the Reason / reasons for the learning may be related to work or not (for example, in order to create their own business, to obtain anew job, a new work position, for family reasons, for integration in social life), or if it is **related to the Objectives and expected results** (for example, in order to attain a qualification, to improvise an acquire new abilities) or if **it has to do to the benefits of these studies** (for example, better wages, better working conditions, keeping the job, access to new job posts, self esteem).

WORK REASONS:

It will be necessary to select, from among the variables that include reasons for involvement in learning activities, those that are considered to be work-related reasons.

In this sense, work-related reasons are considered to be the following:

Variable	Values	Description
FEDREASON _01	1	If they select the following option: To do my work better and/or improve my professional possibilities
FEDREASON _02	1	If they select the following option: To decrease the possibility of losing my job
FEDREASON _03	1	If they select the following option: To increase my possibilities of getting a job or changing to another job or profession
FEDREASON _04	1	If they select the following option: To create my own business

WORK-RELATED ACTIVITIES:

An educational activity is considered to be work related if the interviewee selects one of the reasons considered to be work-related, or carries out the activity during working hours, or the activity is paid by her/her employer or future employer.

TYPE OF FINANCING:

This refers to the FEDPAIDBY, NFEPaidBY1 and NFEPaidBY2 variables, depending on the case. The Type of financing is defined as those persons or institutions that pay the expenses entailed by the educational activities.

FREQUENCY AND ABILITY TO USE COMPUTERS:

This variable determines, in a combined way, the frequency and ability to use computers and the Internet:

ICTCOMPUTER	ICTINTERNET	ABILITY TO USE
Never	Never	They never use computers or the Internet.
Never	It is neither "Never" nor "No/Does not know"	They only use the Internet.
Never or No/Does not know	Never or No/Does not know	No/Does not know
if they mark fewer than 3 options on computer use (ICTCOMPUTER_1 to 10)	or if they mark fewer than 3 options on Internet use (ICTINTERNET _1 and _8)	Basic user
if they mark at least 3 and fewer than 7 options on computer use (ICTCOMPUTER_1 to 10)	or if they mark at least 3 and fewer than 7 options on Internet use (ICTINTERNET _1 and _8)	Advanced user
if they mark more than 8 options on computer use (ICTCOMPUTER_1 to 10)	or if they mark more than 8 options on Internet use (ICTINTERNET _1 and _8)	Expert user

LANGUAGE KNOWLEDGE LEVELS CONSIDERED ¹:

The following levels of language mastery are considered:

LANGUAGE MASTERY LEVEL	DESCRIPTION
Basic level	I understand and use the most common expressions (Use the language for familiar situations and things)
Intermediate level	I understand the common language essentials and write simple texts. (I can describe experiences and events)
Advanced level	I understand a wide variety of complicated texts and use the language flexibly. (I have almost completely mastered the language)

¹ Regarding language knowledge levels, the levels of knowledge does not exactly correspond with the previous publication (AES-07).

ANNEXES.

ANNEX 0. Classification of fields or sectors for Education and Informal Learning.

001 General programmes (with no possible distinction)

Basic training programmes

010 *Basic programmes in infants', elementary, primary, secondary education, etc.*

Literacy and arithmetic programmes

080 *Simple and functional literacy; basic arithmetic*

Personal development

090 *Development of personal skills, for example, behavioural ability, intellectual aptitudes, organisational ability, orientation programmes.*

100 Education (with no possible distinction).

Training of teaching personnel and education sciences

141 *Training of teaching personnel. (143+144+145+146)*

142 *Education sciences: preparation of study programmes of non-professional and professional subjects. Assessment of knowledge, tests and measurements, research on education; other programmes relating to education sciences.*

143 *Preschool education; kindergartens.*

144 *Elementary schools; professional, practical and non-professional classes; adult education.*

145 *Training of teachers of children with disabilities.*

146 *General programmes and specialised training programmes for teaching staff.*

200 Arts and humanities (with no possible distinction).

Arts

211 *Fine arts: drawing, painting and sculpture.*

212 *Dramatic arts: music, drama, dance, circus.*

213 *Graphic and audiovisual arts: photography, cinematography, music production, radio and television production, printing and publication.*

214 *Design.*

215 *Craftwork.*

Humanities (except Spanish and foreign languages)

221 *Religion and theology.*

222 *Foreign languages and cultures: living and death languages and their respective literature, large fields of study.*

223 *Native tongues: current languages or vernacular and their literature.*

224 *History, philosophy and related subjects.225+226.*

225 *History and archaeology.*

226 *Philosophy and ethics.*

300 Social sciences, business education and law. (with no possible distinction)

Social and behavioural sciences

311 *Psychology.*

312 *Sociology, demographics, anthropology (except physical anthropology), ethnology, futurology, geography (except physical geography).*

313 *Political science, peace and conflict studies, human rights.*

314 *Economics, history of economics.*

Journalism and information

321 *Journalism.*

322 *Librarianship and library technical personnel. Museum technical personnel and that of similar establishments. Documentation techniques. Archival science.*

Business and administration studies

341 *Retail trade, marketing, sales, public relations, property issues.*

342 *Marketing and consultancy.*

343 *Financial management, banking administration, insurance, investment analysis.*

344 *Accounting, auditing, bookkeeping, surveying.*

345 *Management, public administration, institutional administration, personnel administration.*

346 *Secretarial and office work.*

347 *Work history.*

Law

380 *Local judges, notaries, law (general, international, employment, maritime, etc.), case law, history of law.*

400 Sciences, Mathematics and Information technology (without possible distinction)

Life sciences

421 *Biology and Biochemistry.*

422 *Sciences environmental.*

Physics, chemistry, geology sciences.

441 *Physics and similar subjects.*

442 *Chemistry and similar subjects.*

443 *Astronomy and space sciences, geology, geophysics, mineralogy, physical anthropology, physical geography and other earth sciences, meteorology and other atmospheric sciences, comprising research into climate, marine sciences, vulcanology, palaeoecology.*

Mathematics and statistics

461 *Mathematics, operations research, numeric analysis.*

462 *Statistics and other similar sectors.*

Information technology

481 *Computer science: Devising systems, IT programming, data processing, networks, operating systems - creation solely of IT programs (the material and equipment must in the engineering sector).*

482 Computer and Internet use. Training in the operating of spreadsheet software, for data processing, for word processing, and for putting together publications.

500 Mechanics, electronics and other technical training; manufacturing and construction.(without possible distinction)

Mechanics, Electronics and Another Technical Approach

521 Mechanics and metalworking.

522 Electricity, energy engineering.

523 Electronics, telecommunications.

524 Chemistry, processes.

525 Vehicle, ships and aircraft maintenance.

Manufacturing industry and production

541 Food and beverages.

542 Textiles, tailoring, footwear, leather.

543 Materials (wood, paper, plastic, glass, etc.).

544 Mining and quarrying.

Architecture and construction

581 Architecture and town planning: structural architecture, landscape architecture, community planning, cartography.

582 Non-residential construction, construction and civil engineering.

600 Agriculture and veterinary medicine (without possible distinction).

Agriculture, livestock and fishing

621 Agriculture, agricultural production, agronomy, livestock.

622 Horticulture and gardening.

623 Forestry and forestry techniques, nature parks, flora and fauna.

624 Fishing, science and fishing technology.

Veterinary medicine

641 Veterinary Medicine, veterinary assistant.

700 Health and social services (without possible distinction) .

Health

721. *Health: anatomy, epidemiology, cytology, physiology, immunology and immuno-haematology, pathology, anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, neurology, psychiatry, radiology, ophthalmology.*

722 *Medical services: public health services, hygiene, pharmacy, pharmacology, therapy, rehabilitation, prostheses, optometry, nutrition.(725+726+727)*

723 *Nursing: Nursing basic.*

724 *dental services: odontology assistant, dental hygienist, dental laboratory technician, odontology.*

725 *Public health and hygiene services.*

726 *Therapy, rehabilitation, prostheses, optometry, nutrition.*

727 *Pharmacy and pharmacology.*

Social services

761 *Social work: assisting disabled persons, childhood assistance, services for young persons, gerontology services.*

762 *Social work: orientation, social work.*

800 Services (without possible distinction).

Personal services

811 *Restaurants, cafes and hotels.*

812 *Travel, tourism and free time.*

813 *Sports and recreational activities.*

814 *Cosmetics services, sciences of the household..*

815 *Hairdressing, beauty treatments and other personal services: laundry and dry cleaning.*

Transport services

840 *Sailors, naval officers, navigation, airline crews, air traffic control, rail transport, road transport, postal services.*

Environmental protection

851 *Conservation, supervision and protection of the environment, monitoring of air and water pollution.*

852 *Natural environment and fauna.*

853 *Health services.*

Security services

861 *Protection of persons and goods police and public order services, criminology, fire prevention and fire fighting, civil security.*

862 *Occupational safety and health. Prevention of occupational risks.*

863 *Military training.*

900 Unknown or unspecified sectors

(This category does not form part of the classification itself, but when compiling data it is needed for the “the unknown and unspecified education sectors”).

ANNEX 1. COUNTRIES (LIST OF REGISTER CODES)

Countries maintaining diplomatic relations with Spain

Continent	Country Codee	Country Name (in dictionary)
EUROPE	101	ALBANIA
	102	AUSTRIA
	103	BELGIUM
	104	BULGARIA
	106	CYPRUS
	107	DENMARK
	108	SPAIN
	109	FINLAND
	110	FRANCE
	111	GREECE
	112	HUNGARY
	113	IRELAND
	114	ICELAND
	115	ITALY
	116	LIECHTENSTEIN
	117	LUXEMBOURG
	118	MALTA
	119	MONACO
	120	NORWAY
	121	NETHERLANDS
	122	POLAND
	123	PORTUGAL
	124	ANDORRA
	125	THE UNITED KINGDOM
	126	GERMANY
	128	RUMANIA
	129	SAN MARINO
	130	HOLY SEE
	131	SWEDEN
	132	SWITZERLAND
	135	UKRAINE
	136	LATVIA
	137	MOLDOVA
	138	BELARUS
	139	GEORGIA
	141	ESTONIA
	142	LITHUANIA
	143	THE CZECH REPUBLIC
	144	SLOVAKIA
	145	BOSNIA AND HERZEGOVINA
	146	CROATIA
	147	SLOVENIA
	148	ARMENIA
	154	RUSSIA
	156	MACEDONIA (EX-YUGOSLAVIAN REPUBLIC)

AFRICA

157	SERBIA
158	MONTENEGRO
201	BURKINA FASO
202	ANGOLA
203	ALGERIA
204	BENIN
205	BOTSWANA
206	BURUNDI
207	Cape Verde
208	CAMEROON
209	UNION OF THE COMOROS
210	REPUBLIC OF THE CONGO
211	Ivory coast
212	DJIBOUTI
213	EGYPT
214	ETHIOPIA
215	GABON
216	THE GAMBIA
217	GHANA
218	GUINEA
219	GUINEA-BISSAU
220	Equatorial Guinea
221	KENYA
222	LESOTHO
223	LIBERIA
224	LIBYA
225	MADAGASCAR
226	MALAWI
227	MALI
228	MOROCCO
229	MAURITIUS
230	MAURITANIA
231	MOZAMBIQUE
232	NAMIBIA
233	NIGER
234	NIGERIA
235	CENTRAL AFRICAN REPUBLIC
236	SOUTH AFRICA
237	RWANDA
238	SAO TOME AND PRINCIPE
239	SENEGAL
240	SEYCHELLES
241	SIERRA LEONE
242	SOMALIA
243	SUDAN
244	SWAZILAND
245	TANZANIA
246	CHAD
247	TOGO
248	TUNISIA
249	UGANDA

AMERICA

250	DEMOCRATIC REPUBLIC OF THE CONGO
251	ZAMBIA
252	ZIMBABWE
253	STATE OF ERITREA
301	CANADA
302	THE UNITED STATES OF AMERICA
303	MEXICO
310	ANTIGUA AND BARBUDA
311	THE BAHAMAS
312	BARBADOS
313	BELIZE
314	COSTA RICA
315	CUBA
316	DOMINIQUE
317	EL SALVADOR
318	GRENADA
319	GUATEMALA
320	HAITI
321	HONDURAS
322	JAMAICA
323	NICARAGUA
324	PANAMA
325	Saint Vincent and the Grenadines
326	DOMINICAN REPUBLIC
327	TRINIDAD AND TOBAGO
328	SAINT LUCIA
329	SAINT KITTS AND NEVIS
340	ARGENTINA
341	BOLIVIA
342	BRAZIL
343	COLOMBIA
344	CHILE
345	ECUADOR
346	CO-OPERATIVE REPUBLIC OF GUYANA
347	PARAGUAY
348	PERU
349	SURINAME
350	URUGUAY
351	VENEZUELA
401	AFGHANISTAN
402	SAUDI ARABIA
403	BAHRAIN
404	BANGLADESH
405	MYANMAR
407	CHINA
408	UNITED ARAB EMIRATES
409	THE PHILIPPINES
410	INDIA
411	INDONESIA
412	IRAQ
413	IRAN

ASIA

414	ISRAEL
415	JAPAN
416	JORDAN
417	CAMBODIA
418	KUWAIT
419	LAOS
420	LEBANON
421	MALAYSIA
422	MALDIVES
423	MONGOLIA
424	NEPAL
425	OMAN
426	PAKISTAN
427	QATAR
431	NORTH KOREA (PEOPLE'S DEMOCRATIC REPUBLIC)
430	KOREA
432	SINGAPORE
433	SYRIA
434	SRI LANKA
435	THAILAND
436	TURKEY
437	VIETNAM
439	BRUNEI
440	Marshall Islands
441	YEMEN
442	AZERBAIJAN
443	KAZAKHSTAN
444	KYRGYZSTAN
445	TAJIKISTAN
446	TURKMENISTAN
447	UZBEKISTAN
501	AUSTRALIA
502	FIJI
504	New Zealand
505	PAPUA NEW GUINEA
506	SOLOMON ISLANDS
507	SAMOA
508	TONGA
509	VANUATU
511	MICRONESIA
512	TUVALU
513	Cook Islands
515	REPUBLIC OF NAURU
516	PALAU
517	EAST TIMOR

OCEANIA

ANNEX 2 2-digit Statistical Classification of Economic Activities (NACE Rev. 2)

Agriculture, cattle breeding, forestry and fishing

- 01** Agriculture, livestock, hunting and related services
- 02** Forestry and forestry activities
- 03** Fishing and aquaculture

B Extractive industries

- 05** Extraction of anthracite, coal and lignite
- 06** Extraction of crude petroleum and natural gas
- 07** Mining of metal ores
- 08** Other extraction industries
- 09** Extraction industry support activities

C Manufacturing industry

- 10** Food industry
- 11** Manufacture of beverages
- 12** Manufacture of tobacco products
- 13** Manufacture of textiles
- 14** Manufacture of garments
- 15** Leather and footwear industry
- 16** Manufacture of wood and of products of wood and cork, except furniture; basket making and wickerwork
- 17** Paper industry
- 18** Graphic arts and reproduction of recorded media
- 19** Manufacture of coke and refined petroleum products
- 20** Chemical industry
- 21** Manufacture of pharmaceutical products
- 22** Manufacture of rubber and plastic products
- 23** Manufacture of other non-metallic mineral
- 24** Metallurgy; manufacture of iron, steel and ferro-alloy products
- 25** Manufacture of metal products, except machinery and equipment
- 26** Manufacture of computer, electronic and optical products
- 27** Manufacture of electrical material and equipment
- 28** Manufacture of machinery and equipment n.e.c. (not classified elsewhere)
- 29** Manufacture of motor vehicles, trailers and semi-trailers
- 30** Manufacture of other transport material
- 31** Manufacture of furniture
- 32** Other manufacturing industries
- 33** Repair and installation of machinery and equipment

D Supply of electrical energy, gas, steam and air conditioning

- 35** Supply of electrical energy, gas, steam and air conditioning

E Water supply, waste management and decontamination activities

- 36 Collection, purification and distribution of water
- 37 Collection and treatment of wastewater
- 38 Collection, treatment and disposal of waste; valuation
- 39 Decontamination activities and other waste management services

F Construction

- 41 Building construction
- 42 Civil engineering
- 43 Specialised construction activities

G Wholesale and retail trade; repair of motor vehicles and motorcycles

- 45 Sale and repair of motor vehicles and motorcycles
- 46 Wholesale commerce and commerce intermediaries, except of motor vehicles and motorcycles
- 47 Retail trade, except motor vehicles and motorcycles

H Transport and storage

- 49 Land transport and transport via pipelines
- 50 Sea transport and transport by domestic navigable routes
- 51 Air transport
- 52 Storage and activities connected to transport
- 53 Post and courier activities

I Accommodation

- 55 Accommodation services
- 56 Food and beverage services

J Information and communications

- 58 Publishing
- 59 Motion picture, video and television programme activities, sound recording and music publishing
- 60 Radio and television programming and broadcasting activities
- 61 Telecommunications
- 62 Programming, consultancy and other activities related to IT
- 63 Information services

K Financial and insurance activities

- 64 Financial services, except insurance and pension funds
- 65 Insurance and pension funds, except compulsory Social Security
- 66 Support activities for financial services and insurance

L Real estate activities

- 68 Real estate activities

M Professional, scientific and technical activities

- 69 Legal and accounting activities
- 70 Central headquarter activities; business and management consultancy activities
- 71 Technical architecture and engineering services; technical trials and analysis
- 72 Research and development
- 73 Advertising and market studies
- 74 Other professional, scientific and technical activities
- 75 Veterinary activities

N Administrative and support services activities

- 77 Rental activities
- 78 Employment-related activities
- 79 Travel agency and tour operator activities, reservation services and related activities
- 80 Investigation and security activities
- 81 Services in buildings and gardening activities
- 82 Administrative office activities and other business support activities

O Public Administration and Defence; Compulsory Social Security

- 84 Public Administration and defence; Compulsory Social Security

P Education

- 85 Education

Q Health and social services activities

- 86 Health activities
- 87 Care in residential establishments
- 88 Social services activities without accommodation

R Arts, recreation and entertainment activities

- 90 Artistic and show business activities
- 91 Activities of libraries, archives, museums and other cultural activities
- 92 Gambling and betting activities
- 93 Sports, recreation and entertainment activities

S Other services

- 94 Associative activities
- 95 Repair of computers and personal and household goods
- 96 Other personal services

T Private households with employed housekeeping staff; activities of households as producers of goods and services for their own use

97 Private households with employed persons

98 Activities of households as producers of goods and services for their own use

U Activities of extraterritorial organisations and bodies

99 Activities of extraterritorial organisations and bodies

ANNEX 3. 2-digit Uniform International Classification of Occupations structure, 2008 (ISCO-08)

Large groups and main subgroups

1 Directors and managers

- 11 Executive directors, management personnel of the public administration and members of the of the executive power and of legislative bodies
- 12 Executive and commercial directors
- 13 Directors and managers of production and operations
- 14 Managers of hotels, restaurants, businesses and services

2 Scientific and intellectual professionals

- 21 Professionals in science and engineering
 - Health professionals
 - Teaching professionals
- 24 Specialists in Public Administration and company organisation
- 25 Information and communications technology professionals
- 26 Professionals in law, in social sciences and cultural

3 Intermediate-level technicians and professionals

- 31 Intermediate level professionals in sciences and engineering
- 32 Intermediate level health professionals

- 33 Intermediate level professionals in financial and administrative operations
- 34 Intermediate level legal, social, cultural and associated service professionals
- 35 Information and communications technology technicians

4 Administrative support personnel

- 41 Office workers
- 42 Public-facing employees
- 43 Accounts employees and those in charge of materials records
- 44 Other administrative support personnel

5 Workers in services and salespersons in shops and markets

- 51 Personal services workers
- 52 Salespersons
- 53 Personal care workers
- 54 Protection service personnel

6 Farmers and qualified livestock, forestry and fishing workers

- 61 Market farmers and qualified agriculture and livestock workers
- 62 Qualified forestry workers, fishermen and hunters
- 63 Farming and livestock workers, fishermen, subsistence hunters and gatherers

7 Officers, skilled workers and artisans of mechanical arts and other trades

- 71 Officers and skilled construction workers excluding electricians
- 72 Officers and skilled metallurgy workers, mechanical construction and the like
- 73 Artisans and skilled graphic arts workers
- 74 Specialised electricity and electrical technology workers
- 75 Food processing and tailoring skilled workers, carpenters, other tradespersons and the like

8 Installation and machinery operators and assemblers

- 81 Fixed installations and machine operators
- 82 Assemblers
- 83 Drivers of vehicles and mobile heavy plant operators

9 Elementary occupations

- 91 Cleaners and assistants
- 92 Farming and livestock, fishing and forestry labourers
- 93 Mining, construction, manufacturing and transport labourers
- 94 Food preparation assistants
- 95 Travelling sales persons and the like
- 96 Refuse collectors and other basic occupations

0 Military occupations

- 01 Armed forces officers
- 02 Armed forces NCOs
- 03 Other members of the armed forces

ANNEX 4. Educational levels

Educational situation	Code
Cannot read or write.	01
Spent less than five years at school	11
Primary studies certificate	21
Went to school for 5 years or longer, but did not reach the last academic year of OSE, GBE or Elementary Post-Secondary Education	21
Education Certificate	21
Reached the last academic year of OSE, GBE or Elementary Post-Secondary Education but did not pass	21
Obligatory Secondary Education Graduate qualification (O S O) or GBE or basic Post-Secondary Education Certificate)	21
Post-Secondary Education Qualification (or Post-Secondary Graduate, Compulsory Secondary Education, Intermediate Education Reform etc.)	32
Advanced Official Certificate-Languages (Official Languages School Qualification)	31
<i>Professional training qualifications or certificate of professional ability.</i>	
- Certificate attained via initial professional qualification programmes (PIQP)	22
- Social Guarantee Programmes	22
- Trade School Certificate	22
- Workshop school certificate	22
- Professional qualifications (professional training).	22
- Technician Qualification, in other words, has passed an intermediate training cycle, VT I or equivalent.	32
- Technician Qualification, in other words, has passed an intermediate training cycle, VT II or equivalent.	51
<i>Professional music and dance education qualifications.</i>	
- Elementary Music and Dance Qualification	21
- Professional Music and Dance Qualification (Intermediate singing, Intermediate music education, Intermediate applied arts and artistic trades, elementary music conservatoire)	31
- Higher Qualification in Artistic education (Higher qualification in Music and dance, Drama, Preservation and y restoration of cultural goods)	51
<i>Sports Education Qualifications.</i>	
- Sports Technician Qualification having passed an Intermediate sports education	32
- Advanced Sports Technician Qualification having passed an Advanced sports education.	51

<i>Plastic Arts and Design Qualifications.</i>	
- Plastic Arts and Design Technician Qualification having passed the corresponding Intermediate training cycle	32
- Advanced Plastic Arts and Design Technician Qualification having passed the corresponding Advanced training cycle.	51
<i>Military education qualification.</i>	
- First-level Intermediate Command Qualification having passed the corresponding access training cycle for the scale of Specialised Second corporal and first corporal, Civil Guards, Basic Scale of the National Police Corps.	32
- Military Technician Qualification.	32
- Military education qualification (NCO scale), Civil Guard (NCO Scale) or Second-level Intermediate Command Qualification.	51
- Military Education Qualification (Officer Scale);Civil Guard (Officer Scale).	52
Diploma, Technical Architect or Technical Engineer qualification.	52
Graduate, Architect or Engineer qualification.	52
University degree	52
EHEA official master's.	52
Health Specialist Qualification	52
Doctorate	60

ANNEX 5. Languages.

code	language
BUL	Bulgarian
SPA	Spanish
CZE	Czech
DAN	Danish
GER	German
EST	Estonian
GRE	Greek
ENG	English
FRE	French
GLE	Irish
ITA	Italian
LAV	Latvian
LIT	Lithuanian
HUN	Hungarian
MLT	Maltese
DUT	Dutch
POL	Polish
POR	Portuguese
RUM	Rumanian
SLO	Slovak
SLV	Slovene
END	Finnish
SWE	Swedish
BAQ	Basque
GLG	Galician
LTZ	Luxembourgish
CAT	Catalan
VAL	Valenciano
WEL	Welsh
HRV	Croatian
ICE	Icelandic
MAC	Macedonian
TUR	Turkish
NOR	Norwegian
ALB	Albanian
BEL	Byelorussian
BOS	Bosnian
RUS	Russian
SRP	Serbian
UKR	Ukrainian
ARA	Arabic
CHI	Chinese
HIN	Hindu
Textile, Clothing, Footwear	Indonesian
JPN	Japanese
KOR	Korean
MON	Mongolian
NEP	Nepali

VIE	|	Vietnamese
OTH		Other languages