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SECTION 1: INTRODUCTION

1.1 Purpose of these methodological guidelines

This manual will be used as a handbook for planning and implementing the 2016 AES. It can also help in other data collections on education and training. More specifically, it aims at guiding national authorities to carry out the Adult Education Survey allowing for the collection of high quality data and the compilation of harmonised indicators on lifelong learning by Eurostat.

It is made of five sections. The first section covers issues of users' needs and objectives of the AES, the second section corresponds to the suggested standard questionnaire. The third section provides guidelines to support Member States in the elaboration of their national questionnaires and assist interviewers in using the questionnaire in the field.

The fourth section describes methodological aspects and provides guidelines for a harmonised implementation of the AES while the fifth chapter gives information on the validation of the data before sending them to Eurostat.

A set of annexes complement the five sections. They give details about the classifications needed to code some of the variables as well as additional methodological information among which: definition of concepts, technical elements to build an integrated series on lifelong learning, list of main indicators which can be computed from the AES, the programmes to compute them and the Commission Regulation that sets the European requirements (statistical requirements and content) of the 2016 Adult Education Survey.

1.2 History of the AES

The AES is one component of the system producing statistics on adult education in Europe. The other two components are the Labour Force Survey (LFS) and the Continuing Vocational Training Survey (CVTS). Regarding the other two sources of information, the LFS – the aim of which is to provide data on the labour market – provides information on the annual evolution of a limited set of indicators on participation in lifelong learning while the CVTS provides data on enterprises' strategies on continuing vocational training and skills development of the employed people.

Already two waves of the Adult Education Survey were carried out:

- first wave from 2005 to 2008: the 2007 (pilot) AES under a gentleman agreement;
- second wave in 2011 and 2012: the 2011 AES under a European legal framework.

a) The genesis of a survey on adult education

In March 2000, Eurostat launched a task force for measuring lifelong learning (TF MLLL). In its final report (in February 2001) the Eurostat TF MLLL highlighted the importance to improve the knowledge and statistical infrastructure on adult education and learning and to develop a standardised data collection. On this basis, Eurostat proposed in 2002, to the Directors of Social Statistics (DSS) a comprehensive system of Adult Education Statistics based on two pillars: the Continuing Vocational Training Survey (CVTS) and the planned Adult Education Survey.

In parallel, since 2000 a series of policy documents were produced by the Commission and Council among which the most important for lifelong learning was the European Commission Communication "Making a European area of lifelong learning a reality" released in November 2001. This Communication stressed the importance of lifelong learning for satisfying the four broad and mutually supporting objectives:

- personal fulfilment
- active citizenship
- social inclusion
- employability/adaptability.

A Commission staff working paper complementing the Communication, entitled "Lifelong Learning Practice and Indicators" (SEC(2001)1939, 28.11.2001) proposed the Adult Education Survey as a source that would improve the information or fill information gaps for fulfilling the above broad objectives.

Subsequently a task force for the development of the Adult Education Survey (TF AES) was created to assist Eurostat to launch such a survey with the definition of the survey subject and the way to approach it being the main focus of its work.

In June 2003, the Task Force on the Adult Education Survey prepared a paper¹ the purpose of which was to define the policy framework and the related information needs of the Adult Education Survey. Its structure was based on the Commission Communication on lifelong learning, putting the learner in the centre of the learning process and proposed the following priorities for action:

- Valuing learning: it refers to the process of recognising participation in and outcomes of (formal, non-formal or informal) learning so as to raise awareness of its intrinsic worth and to reward learning. Focus is on the identification, assessment and recognition of non-formal and informal learning as well as on the transfer and mutual recognition of formal certificates and diplomas.
- Information, guidance and counselling: by means of facilitating access to learning through the availability of quality guidance services.
- Investing time and money in learning: by means of ensuring sufficient investment in education and training. This can be achieved by continuing public funding for the adult and higher education sectors along with an increasing private investment.
- Bringing learning and learners closer together: This can be achieved by developing learning communities, cities and regions, local learning centres and enabling workplaces to become learning organisations.
- Basic skills: improving basic skills (reading, writing and mathematics, IT and language skills, as well as social skills) will allow people and especially the early leavers from education and training to engage in further learning as a basis for personal fulfilment, active citizenship and employability.
- Innovative pedagogy: addresses the shift in emphasis from knowledge acquisition to competence development and the new roles for teachers and learners that this implies.

These principles set the foundations for the first collection of the Adult Education Survey.

b) The pilot exercise: 2007 AES

In June 2004, the Adult Education Questionnaire Development Group was created to prepare the 2007 AES questionnaire while the Classification of Learning Activities (CLA) was developed and tested. At the Education and Training Statistics Working Group meeting in February 2005, a draft questionnaire together with the precision requirements for the survey and the results of CLA testing were presented. After this meeting, the TF AES Pilots was created to a) assist countries in the implementation of the pilot AES and b) evaluate the content of the questionnaire and methods of testing as well as the results of the national pilot exercises. Following the discussion on the comments to the draft version

¹ Vegliante, A. and Clifit-Minot, E. (2003) Adult Education Survey Policy Framework. 3rd meeting of the Eurostat Task Force on Adult Education Survey, 16-18 June 2003, Helsinki

questionnaire and the result of the first pilot exercises that took place in June 2005, the final version of the questionnaire was prepared.

Subsequently, the first pilot AES was carried out by EU, EFTA and candidate countries during the period 2005 to 2008. Its aim was to collect information on participation in lifelong learning (formal, non-formal and informal learning) including job-related activities, characteristics of learning activities, self-reported skills as well as social and cultural participation, foreign language skills, IT skills and background variables related to the main socio-demographic characteristics of the respondents.

The results from 22 countries that participated to the pilot AES were made available in July 2009.

c) Implementation of the 2011 AES

In its June 2009 meeting, the TF AES finalised the pilot AES exercise, reviewed Eurostat's strategy for lifelong learning statistics² and initiated work for the planning of the 2011 AES. This work involved the development of a new questionnaire and manual as well as the drafting of the Commission Regulation on the Adult Education Survey.

Once adopted the Commission Regulation (EU) 823/2010 implementing measures of the Regulation (EC) No 452/2008 concerning the production and development of statistics on education and lifelong learning allowed for the data collection of a fully harmonised AES. According to the regulation the AES is carried out every five years. The fieldwork of the first AES under this legal framework took place between 1 July 2011 and 30 June 2012.

On the whole, 30 countries implemented the survey: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, The Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, The United Kingdom, Norway, Switzerland and The Republic of Serbia.

The first results were released on the Eurostat website in February 2013.

d) Preparation of the 2016 AES

In order to prepare the 2016 AES, Eurostat set up – in agreement with the Directors of Social Statistics – an AES Task Force. The AES Task Force met three times (in June and December 2013 and in May 2014) in order to define the requirements for the 2016 AES in terms of data collection and reference period, variables covered, quality criteria and data transmission and the methodological guidelines.

Based on the recommendations of the TF Eurostat prepared the draft Commission Regulation for the 2016 AES. It built upon the countries' experiences of the 2011 AES and the needs of European policies in terms of education and training expressed by stakeholders such as DG EAC (Directorate General Education and Culture) and CEDEFOP (European Centre for the Development of Vocational Training). The Education and Training Statistics Working Group and the Directors of Social Statistics were consulted on the draft Commission Regulation.

According to the European statistical programme 2013-2017, the development of statistics provided on education and training includes a 'rationalisation and modernisation of the Adult Education Survey'. The setting up of the Task Force on the 2016 AES was an essential element to define the requirements for the 2016 AES data collection in a way that takes changes and new developments in lifelong learning into account while keeping coherence with 2011 AES where appropriate.

The 2016 AES Commission Regulation was voted in May 2014 by the European Statistical System Committee (see Annex 15).

² As agreed by the Directors of Social Statistics in September 2009 :

https://circabc.europa.eu/sd/a/b5fb86e0-0c75-4549-a455-f93533337ddc/Point%204_8%20update%20education%20and%20LLL%20_revised%2017%2009_.pdf

1.3 Policy needs for statistical information about adult education

Lifelong learning was very important in the Lisbon strategy and more precisely in the “Education and Training 2010” work programme as well as in the European Employment Strategy, as it was reflected by the European Commission's 2007 Communication on the Integrated Guidelines for Growth and Jobs (2008-2010).

The conclusions of the Council on education and training of May 2009 confirmed that lifelong learning remained a strategic issue. The participation of adults in lifelong learning continues to hold a high profile both on the European policy agenda – particularly with a view to the Europe 2020 strategy as well as to the strategic framework for education and training (ET 2020) – and at national level where many countries put in place specific frameworks for enhancing the skills of the adult population in order to increase their employability. Moreover, at the European level, the 'Agenda for new skills and jobs' flagship initiative aims to provide people with the right skills for employment throughout their working lives.

Therefore, high quality data on participation in formal and non-formal education and training are crucial to better underpin the actions taken under the various initiatives targeting lifelong learning.

A list of policy relevant indicators can be obtained through the 2016 AES on the following topics:

- **Valuing learning:**
 - Participation in formal/non-formal learning activities by provider and field of learning, by training setting (during and outside working hours), by reasons for participation (job-related, non-job related);
 - Courses started and successfully completed by field, courses dropped, certification of education and training by type of learning, opinion on usefulness of learning;
 - Obstacles in participation (reasons for non-participation).
- **Information, guidance and counselling:**
 - Source of information and guidance, focused on free of charge information;
 - Type of guidance/counselling services.
- **Investing time and money in learning:**
 - Volume of participation (time spent in learning) by type of learning activity (formal, non-formal);
 - Source of financing (learner, relative, government, employer, etc.);
 - Outcomes of learning.
- **Bringing learning and learners closer together:**
 - Access to information about learning possibilities by knowledge of learning possibilities, by provision of financial support, by time of training (during working or leisure hours).
- **Basic skills (key competences):**
 - Self-perceived level of a foreign language;
 - Use of acquired skills by type of setting (at the workplace or in social/cultural environment).

Moreover, as the lifelong learning is learner-centred a indicators can be broken down by:

- Demographic characteristics of the respondent (age, sex, citizenship, etc.) and
- Characteristics influencing access to learning (educational attainment, social profile, family situation, position on the labour market, income, etc.).

In the context of policy making/monitoring it is also of high interest to properly collect and disseminate data on:

- Job-related and employer-sponsored learning as they represent essential components of adult learning;

- several types of non-formal learning, including forms of learning which are different from courses, in particular guided-on-the-job training as a form of work-based learning;
- quality of the learning (perceived usefulness and outcomes) as this is an essential component together with and beyond participation.

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COUNTRY: Country of residence

Short description

The respondent's country of residence

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
2 digits	A standard Eurostat classification based on the ISO 3166 country classification; codes provided in the Annex 5 of the AES manual

- Classification used Standard code list for countries (based on the ISO 3166 country classification)

Definition

- Filter None
- Reference period Moment of the interview
- Concept The respondent's country of usual residence
- Technical issues -

Rationale

'Country of residence' is to be considered as a basic and obvious variable, especially of the context of country-comparison within the European Statistical System. The information is complementary to the variables 'Country of birth' and 'Country of citizenship'.

Issues and developments

- For most social surveys, such variable will not put any significant burden on respondents nor on the statistical institutes as the information is quasi automatically available. However, for certain groups of respondents, the 'Country of residence' may be ambiguous, such as (recent) expatriates or people with a second or holiday home (and who may be registered in administrative files in both countries).
- Misclassification error is nevertheless possible where the statistical unit's country of residence cannot be checked or collected: e.g. in the Structure of Earnings Survey (SES), the employer reports on the employees' earnings and working time and although most workers will presumably live in the country where the enterprise or local unit is based, this assumption may be problematic in border regions (cross-border workers).

Good practices

Data collection from the sampling frame (or register)

REGION: Region of residence

Short description

The respondent's region of residence

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
2 digits	Coding according to NUTS at 2-digit level; details provided in the Annex 5 of the AES manual

- Classification used Nomenclature of Territorial Units for Statistics ([NUTS](#)), level 2

Definition

- Filter None
- Reference period Moment of the interview
- Concept The respondent's region of residence
This variable indicates the region where the respondent is living (place of usual residence).
- Technical issues -

Rationale

Regional information is important in the context of social statistics for a number of reasons. First, major differences in living standards exist between regions within a country – even in smaller countries (e.g. capital region versus more rural areas). Second, many policies designed to address social exclusion and poverty, particularly those that address infrastructural deficits, are best implemented at regional level. Third, the labour market can differ a lot between regions within the same country, etc.

Issues and developments

- NUTS level recommended

From an analytical point of view, 2-digit level of NUTS is recommended. Note that for 1 third of EU countries the 2-digit level corresponds to the country level. However, for sample reasons, this goal may not be feasible due to sample size restrictions. Where this is the case, intermediate solutions could be considered, e.g. if a country is due to sample size restrictions not able to comply with the NUTS 2 breakdown, a simplified breakdown in, for example, 3 or 4 regions could be a pragmatic alternative.

Good practices

Data collection from the sampling frame (or register)

DEG_URB: Degree of urbanisation

Short description

Degree of urbanisation of the area the respondent lives in

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Densely-populated area
2	Intermediate area
3	Thinly-populated area

- Classification used Classification on Local Administrative Units ([LAU](#)) developed by Eurostat

Definition

- Filter None
- Reference period Moment of the interview
- Concept Degree of urbanisation

The concept ‘urbanisation’ has been introduced in order to indicate the features of the area where the respondent lives (for the definition of ‘area’ please see below in section “Issues and developments”).

Three area types have been identified as follows:

Densely-populated area: refers to a contiguous set of closely related local units, each one of which having a density greater than 500 inhabitants per km², and the total population of which being of at least 50,000 inhabitants

Intermediate area: refers to a contiguous set of closely related local units that do not pertain to a densely populated area, each one of which having density greater than 100 inhabitants per km², and where the total population is at least of 50,000 inhabitants, or it refers to a set that is adjacent to a highly populated area

Thinly-populated area: refers to a contiguous set of closely related local units that are not part of a densely populated area, or of an intermediate area.

- Technical issues According to the Labour Force Survey recommendations, a set of local areas totalling less than 100 square kilometres, not reaching the required density, but entirely enclosed within a densely populated or intermediate area, is to be considered to form part of that area. If it is enclosed within a densely populated area and an intermediate area, it is considered to form part of the intermediate area.

The calculations of the density of population for the “local unit”, the total population of the contiguous area for the densely populated and intermediate areas, and the “situation” (enclosed or not) for the isolated local units have to be made in order to guarantee harmonised application of the definitions. This would normally be available at the National Statistical Institution, since it is needed for the Labour Force Surveys.

The information on the urbanisation of the area may be available from the sampling frame, from registers, or the interviewer may record information on the locality (such as the name of the commune/Demos/Gemeinde/municipio/ward etc.) which would permit it to be classified according to one of the three categories outlined above without any significant burden on the respondents.

Rationale

There are important differences in the form that social exclusion takes between urban and rural areas. For instance, housing costs tend to be higher in urban areas, while access to essential services and opportunities for social and cultural participation may be more restricted in rural areas. Problems with vandalism and crime also tend to be more prevalent in urban areas. Labour market occupation tends also to be different in rural and urban areas. Access to broadband or mobile telecommunication networks can be problematic in more remote rural areas.

A measure of the extent of urbanisation of the area is important, therefore, as an explanatory variable in analyses of social statistics.

Issues and developments

- In the definition of ‘Degree of urbanisation’ there is a criterion of geographical in combination with a minimum population threshold based on population grid square cells of 1 km². The classification has been revised several times, most recently in 2012.
- An ‘area’ consists of a group of contiguous ‘local areas’. A ‘local area’ in each country corresponds to entities provided in the Annex 5.

Good practices

- Data collection from the sampling frame (or register).
- Conversion tables to convert municipal codes into the three degrees of urbanisation are made available by Eurostat to the NSIs through national coordinators of the social variables and also on CIRCABC. This brings the data collection burden down to recoding the municipal code in the survey database into the degree of urbanisation by a simple look-up in the conversion table.

REFYEAR: Year of interview

Short description

The year of the interview

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
4 digits	The 4 digits of the reference year (either 2016 or 2017)

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept Year of interview
This variable refers to the year when the interview took place.
For instance, if the interview took place in September 2016, then REFYEAR should be equal to 2016.
This variable does not refer to the reference period at all.
- Technical issues -

Rationale

-

Issues and developments

-

Good practices

- This variable is filled in by the interviewers
- REFYEAR may differ for respondents of a survey when the survey started in 2016 and ended in 2017. It is supposed to be filled in by the interviewer.

REFMONTH: Month of interview

Short description

The month of the interview

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept Month of interview
REFMONTH coincides with the month when the interview took place, e.g. if the interview takes place in September 2016 REFMONTH shall be coded 09.
- Technical issues -

Rationale

This variable is provided for reasons of reference and comparison with other related data. It helps knowing the end of the reference period which is 12 months prior to the interview.

Issues and developments

-

Good practices

- This variable is filled in by the interviewer
- REFMONTH may differ for respondents to the same survey when the survey started in a given month and ended in another month.

RESPID: Identification of the respondent

Short description

The respondent's identification number

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
Numeric: <i>(from 1 to end of sample)</i>	Identification code of each record

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept The respondent's identification number
- Technical issues The identification number is unique for each record and shall correspond to one respondent only.

Rationale

This variable is useful for reasons of reference to each record / respondent.

Issues and developments

-

Good practices

-

INTMETHOD: Data collection method

Short description

The method used for the data collection

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
10	Postal, non-electronic version
11	Postal, electronic version
20	Face-to-face, non-electronic version
21	Face-to-face, electronic version
30	Telephone, non-electronic version
31	Telephone, electronic version
40	Use of internet
50	Mixed mode collection (e.g.: both postal and face-to-face interview)

- Classification used Not applicable

Definition

- Filter None
- Reference period The period in which the data collection took place
- Concept Data collection method
There are various collection modes. A detailed description of the most frequent methods can be found in the section “Survey guidelines”.
- Technical issues -

Rationale

This variable provides information which can be useful for the quality assessment of measurement errors as well as the data comparability across countries.

Issues and developments

-

Good practices

May be filled-in at the central office during data processing

HHNBERS: Number of people living in the household

Short description

Number of people living in the same household (including the respondent)

Standard question

How many people live in this household (including you)?

Coding

- Transmission codes

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
HHNBERS_tot	0-98	Total number
HHNBERS_0_13	0-98	0-13 years old
HHNBERS_14_24	0-98	14-24 years old
HHNBERS_25plus	1-98	25 years old and older (including the respondent)
	-1	No answer

- Classification used Not applicable

Definition

- Filter None
- Reference period Moment of the interview
- Concept Number of people living in the same household
Private households are classified by the total number of household members, broken down by age. According to the EU-SILC definition of a household member, the following people must, if they share household expenses, be regarded as household members:
 1. people usually resident, related to other members;
 2. people usually resident, not related to other members;
 3. resident borders, lodgers, tenants with no private address elsewhere, actual/intended stay one year or more;
 4. visitors with no private address elsewhere, actual/intended stay one year or more;
 5. live-in domestic servants, au-pairs with no private address elsewhere, actual/intended stay one year or more;
 6. people usually resident, but temporarily absent from the dwelling (for reasons of holiday travel, work, education or similar) with no private address elsewhere, actual/intended absence less than one year;
 7. children of the household being educated away from home with no private address elsewhere, continuing to retain close ties with the household;
 8. people absent for long periods, but having household ties (e.g. people working away from home), child or partner of other household member, with no private address elsewhere, continuing to retain close ties with the household;

9. people temporarily absent but having household ties (e.g. people in hospital, nursing homes or other institutions), with clear financial ties to the household, actual/prospective absence less than one year.

➤ ‘Shares in household expenses’ include benefiting from expenses (e.g. children, people with no income) as well as contributing to expenses. If expenses are not shared, then the person constitutes a separate household at the same address.

➤ A person shall be considered as a ‘usually resident’ member of the household if he/she spends most of his/her daily rest there, evaluated over the past one year. People forming new households or joining existing households shall normally be considered as members at their new location; similarly, those leaving elsewhere shall no longer be considered as members of the original household.

- Technical issues Information shall be collected about all people living in private households on their relationship to other members of the household. Proxy answers are recommended, when not all the household members are interviewed.

The variable is simplified compared to the 2011 AES. The focus is on the total number of people living in the household (respondent included) and on three sub-groups, the limits of which are given by the age of the household members. We are interested in knowing the number of people aged 13 and less, then the number of people aged 14 to 24 and finally the number of people aged 25 and more. The first sub-group helps computing the equivalised household income, and the second sub-group helps computing the household type.

Each of the four variables is coded -1 in case of no answer.

Rationale

The size and type of the household someone lives in influences the individual behaviours in society (time management, time spent on education, consumption patterns, etc...). Therefore, information on the household size may be quite useful in order to account for participation in lifelong learning and also for data comparison at household level.

Issues and developments

-

Good practices

Data collection through interviews.

HHTYPE: Household type

Short description

Type of the respondent's household

Standard question

What is the type of your household?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
10	One person household
21	Lone parent with child(ren) aged less than 25
22	Couple without child(ren) aged less than 25
23	Couple with child(ren) aged less than 25
24	Couple or lone parent with child(ren) aged less than 25 and other people living in household*
30	Other**
-1	No answer

* "Other people" are people who do not have any parent-child relationship with the couple or the lone parent

** Category "Other" includes all other households in which there is no parent-child relationship

- Classification used Not applicable

Definition

- Filter None
- Reference period Moment of the interview
- Concept

The type of the respondent's household

The type refers to the people that comprise the household. Households are classified according to the number of adults and number of dependent children that are living in the household.

 - The term 'couple' includes married couples, registered couples, and couples who live in a consensual union.
 - 'Child' refers to a blood, step- or adopted son or daughter (regardless of age and marital status) who has usual residence in the household of at least one of the parents, and who has no partner or own child(ren) in the same household.
- Technical issues

One of the methods developed for identifying household type is the household relationship matrix method. This matrix allows for the collection of all relationships between all household members.

A second alternative is to record the relationship between each member and one 'key' individual in the household (the household reference person). When the household's reference person is chosen carefully, this method gives accurate information for most household types and family types. In certain cases, however, for instance in multiple family households, this method will not always give the information that is required.

A third option is to record for each person the person number of their spouse, mother, and father, if these people are in the household. In addition, the person number of own children could be recorded for each adult.

Rationale

Household type is extremely useful to have the information on dynamics of household structure.

Issues and developments

-

Good practices

Data collection through interviews.

HHINCOME: Net monthly equivalised household income

Short description

The “net monthly equivalised income of the household”

Standard question

See below, the proposed mini-questionnaire under ‘technical issues’.

Collection code:

Codes	Labels
L L L L L L L L	Net monthly equivalised income of the household (value in national currency)

Coding

- Transmission codes: EQUIVALISED household total net monthly income³

Codes	Labels
1	Below 1 st quintile
2	Between 1 st quintile and 2 nd quintile
3	Between 2 nd quintile and 3 rd quintile
4	Between 3 rd quintile and 4 th quintile
5	4 th quintile and above
0	Refusal (optional)
-1	No answer

- Classification used Not applicable

Definition

The definition of the variable is taken from proposals from Eurostat Unit F3 (in charge of EU-SILC data collection), to be used in other social surveys. More information about EU-SILC implementation is available on CIRCABC⁴.

- Filter None
- Reference period Current month (if income varies between months, an average is to be given)
- Reporting unit household/individuals
- Responding unit household respondent⁵
- Concept

Household income: The income of all people who are currently members of the household at the date of the interview as well as the income received by the household as a whole are to be taken into account.

Monthly income: To ease data collection, the general recommendation is to use the easiest reference period in each country monthly or yearly although

³ i.e. household total net monthly income ÷ equivalent household size according to OECD – modified scale.

⁴ <https://circabc.europa.eu/w/browse/334d943f-6f71-4f4b-9c7e-a6767a3fe164>

⁵ As defined in COMMISSION REGULATION (EC) No 1981/2003 of 21 October 2003 implementing Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community statistics on income and living conditions (EU-SILC) as regards the fieldwork aspects and the imputation procedures.

annual income is the more commonly recommended reference period. In case the household income varies substantially over the year (in case of seasonal activity or dividends/bonuses for instance), it is recommended to collect average monthly income (in practice, to obtain the net household income over the past year and divide by twelve).

Net income: Net income means amounts as the household receives them, which is normally after deduction of tax and contributions to social insurance and pensions as well as after deduction of inter-household cash transfers paid, and thus represents the **amount available for consumption expenditure, savings and investment**.

Income components: In calculating the total net monthly income of the household, **the main income components are to be considered:**

(a) Income from work:

– Wages and salary earnings (including bonuses regularly paid at the time of each payment – such as regular overtime hours, bonuses for team, night or weekend work, tips and commissions) for the most recent month before the interview (or the monthly average for a recent period if this is easier to collect or estimate); net of any amounts deducted at source for tax and contributions to social insurance and pensions.

– For income from self-employment, the respondents can be asked for an estimate of their (usual) monthly disposable income, taking into account drawings from their own business. Alternatively, monthly trading profit estimates could be supplied, together with an estimate for income tax payable.

The income should be net of any amounts deducted at source for tax and contributions to social insurances and pensions.

Negative income (e.g. trading losses) should be treated as zero amounts.

PLUS

(b) Income from social benefits (unemployment benefits, old age and survivors' benefits, sickness and disability benefits, education-related allowances, family/children related allowances, social exclusion allowances not classified elsewhere and housing allowances). It should refer to the last monthly payment received before the interview (or the monthly average for a recent period if this is easier to collect or estimate); net of any amounts deducted at source for tax and contributions to social insurance and pensions.

PLUS

(c) Other cash income components: income from capital and investments (property, assets, savings, stocks, shares private pension plans, etc.); income transfers from other households (for example alimony payments)...

MINUS

(d) Income transfers paid to other households (for example alimony payments)

Equivalised income: the total income variable is to be corrected for the household composition (dividing the income by an equivalence scale that weights different members within the same household with different weights according to their ages).

For that purpose, the OECD modified scale should be used (giving a weight of 1.0 to the first member of the household aged 14 or more, 0.5 to each additional member aged 14 or more and 0.3 to each member aged less than 14 years old).

o Technical issues

- In case registers are used, the national consistency is ensured.
- In case the information is collected via interviews:
 - As the general public has little knowledge of equivalence scales, it is not feasible to collect information on equivalised income directly by interview for any relevant survey.

Consequently, instead of the equivalised household income, it is proposed **to ask in the interview the total net household income, and to calculate the equivalised net income afterwards**, using the separate variable on the household composition (HHNBPERS and sub-groups) which gives the exact number of people aged above and below 14.

- For the total household net income, the exact or estimated total amount should be asked in a first stage.

(See example questionnaire below.)

During subsequent data processing, the collected income value for the household (exact or approximate amount) will be converted to equivalised income using the separately collected data on household composition. This will be done by dividing the collected income value by an equivalence scale that weights different members within the same household with different weights according to their age. The OECD modified scale should be used. The resulting figure is attributed to each individual household member.

Except for single person households, this equivalised value per individual will be higher than the simple household net income per capita (i.e. total net monthly income of the household divided by total number of household members) due to the implied economies of scale.

If the respondent does not know the exact or approximate amount for his/her household, he/she should be requested to indicate the income range corresponding to the total household net income per month. The interviewer will be given a table where the household income range appears. *(See example questionnaire below.)*

***Note:** The post treatment of grouped income distribution requires special attention. Given the aim is to gather individual equivalised net monthly disposable incomes into quintile classes, individuals for which household income is reported using ranges should be given an approximate income. The simplest approximation is to assume uniform distribution of income in each income classes (except for the open top class). The number of ranges has to be determined by an ex ante analysis of the household income distribution at national level. The number of classes should be enough so to obtain adequate a good shaping of the distribution and to limit approximation.*

Imputation of missing data: Where a respondent is unable or unwilling to supply actual income values or an approximate income range, there will be missing data on total household net monthly income. In these circumstances, it will be necessary to impute values. Imputation methods based on those used in EU-SILC at national level may be used for this purpose. It may be possible to use external sources (e.g. administrative registers) to complete this information.

Where a respondent is unable or unwilling to supply actual information for the separate variable on household composition (people aged above/below 14), there will be a potential inability to convert collected income data into

per capita amounts or into equivalised income values. It may be possible to complete the household composition information from external sources.

Proposal of a mini questionnaire to collect income (data on household income):

<p>Q1: If you add up the income from work and from social benefits, income from capital and any other regular source of income for all the members of your household, also taking into account the regular inter-household cash transfers paid and received, do you know what your household's total net monthly income per month is?</p> <p>YES => Q2 NO => Q3 Refusal=> Q3</p> <p>Q2: What is your household's total net income per month? If you don't know the exact figure, please give an estimate.</p> <p>VALUE L L L L L</p> <p>Q3: If you cannot provide an estimate or exact amount of your income, can you provide an approximate range instead? Is your household's total net monthly income⁶</p> <p>0 to under 600 EURO 600 to under 800 EURO 800 to under 900 EURO 900 to under 1000 EURO 1000 to under 1200 EURO 1200 to under 1300 EURO 1300 to under 1500 EURO 1500 to under 1700 EURO 1700 to under 2100 EURO 2100 EURO or more (MAX value)? MISSING</p> <p>NB1. The EURO values should be replaced with approximate values in national currency.</p> <p>NB2. To avoid coding errors, it is suggested to leave the calculation of equivalised amounts (and their conversion into quintiles) to the post-collection processing.</p>

Rationale

- For the collection of total household net income:

The aim of this variable is to obtain a proxy of the economic well-being of the respondent. The standard of living of a person not only depends on the income of this person but also on the income received by the rest of the people living with him/her. For this reason, the variable of interest for measuring the well-being is the total household income.

In addition, the net and not the gross income is of interest because it gives an idea of what households actually have available to spend or save.

- For the adjustment to equivalised income:

Other things being equal, a large household will have a lower standard of living from the same income received by a small household. It is therefore standard practice to apply an "equivalence scale" to

⁶ The income bands proposed here, for illustrative purposes only, are based on the EU income distribution derived from SILC 2005.

income values in order to reflect differences in size and composition, and thereby obtain a more comparable measure of economic well-being.

- *For the collection of monthly income:*

The spectrum of choices of reference period ranges from income received over the whole lifetime to income received over the most recent period (last week or month). Although annual income is the more commonly recommended reference period, monthly income is proposed here for its simplicity and because our goal is to use the variable to classify people in different “standard of living groups” and not to compare people at individual level according to the income received. For a high percentage of respondents, the monthly income multiplied by twelve will correspond to the annual amount; consequently, the majority of people will be classified correctly.

Issues and developments

The purpose of this variable is not to carry out in-depth studies on income (this remain in the scope of EU-SILC), but to classify households.

For that purpose, certain flexibility can be allowed among countries, provided that in each country, data collected are consistent.

In particular, some flexibility can therefore be allowed:

On the monthly income recommendation:

- for countries where only *annual* income is available in the survey vehicle or from administrative sources, this reference period can be used (in that case, the collected value would be divided by twelve). Moreover, in case the household income varies substantially over the year (in case of seasonal activity or dividends for instance), it is recommended to collect average monthly income (in practice, to obtain the net household income over the past year and divide it by twelve).

On the choice of the equivalence scale to be used:

- a decision on the appropriate equivalence scale for the adjustment and comparison of household incomes has already been reached at EU level in the context of the Open Method of Coordination, concerning the use of the OECD-modified scale.

On the order of the questioning:

- due to its sensitive nature and the complexity of the concept, the question can be asked at the very end of the questionnaire so that the respondent is not tempted to stop the interview by judging that asking for income is not appropriate in a survey on education for instance.

Good practices

- In case of interviews:
 - As a general rule, it is recommended that this information is collected to the household respondent⁷. If it is not possible/easy to ask the household respondent for a given survey (i.e. when no household component is included in the survey), and if the selected respondent does not know about the household income, it is recommended to ask additional information (such as, for instance, level of education and occupation of the head of the household etc.) in order to impute the household income (imputation methods may be based on those used at national level for EU-SILC).

⁷ As defined in the Commission Regulation (EC) No 1981/2003 of 21 October 2003: "Interview information relating to the whole household and general information on each household member shall be provided by (one or more) members of the household. The household respondent shall be chosen according to the following priorities:

- Priority 1: the person responsible for the accommodation.
- Priority 2: a household member aged 16 or over, who is best placed to give the information".

- The question must be as simple as possible in order not to be cumbersome for the respondent. In a given country, in order to ensure consistency at national level, it is recommended that the instructions for interviewers provide a detailed list of/detailed guidelines on the components that are included in the definition, to be used only at the respondent's inquiry.

The exact or estimated total net household income should be asked in first stage. In case the interviewee does not know this amount/does not want to respond, he/she should be asked to indicate the income range corresponding to the total net household income per month (the interviewers will be provided with the household income ranges). To obtain an amount as detailed as possible, the number of income ranges should be high enough (close to or more than 10 categories); they could be defined on the basis of the information available at the national level.

– During data processing, the target income variable is to be corrected for the household composition (dividing the income by an equivalence scale that weights different members within the same household with different weights according to their ages).

For that purpose, the OECD modified scale should be used (giving a weight of 1.0 to the first member of the household aged 14 or more, 0.5 to each additional member aged 14 or more and 0.3 to each member aged less than 14 years old).

– Only the net monthly equivalised income is transmitted to Eurostat.

SEX: Sex

Short description

Sex of the respondent

Standard question

No specific question used. It can be filled in directly by the interviewer.

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Male
2	Female

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept Sex of the person

Sex refers to the biological sex of the person. According to WHO, “sex” refers to the biological and physiological characteristics that define men and women while “gender” refers to the socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for men and women. Following this description, WHO considers that “male” and “female” are sex categories, while “masculine” and “feminine” are gender categories⁸.

- Technical issues -

Rationale

The need for adequate information on the situation of women and men in all policy areas it is generally recognised. By studying the gender differences and inequalities it is possible to understand them, and on this basis, make plans, formulate and monitor policies in all spheres of society. Hence, the importance of the variable ‘Sex’, being cross-classified with other characteristics of the population, provides the basis for evaluating progress towards the complete elimination of still existing gender-based stereotypes.

Issues and developments

-

Good practices

- Data collection through interviews or registers.

⁸ WHO website: <http://www.who.int/gender/whatisgender/en/>

- For analysis purposes, it is essential that information on sex is not only filled in, but also accurate as much as possible. If the information on sex is missing from the questionnaire, it should be imputed on the basis of the answers provided to other questions.

BIRTHYEAR: Year of birth

Short description

Year of birth of the person

Standard question

What is your year of birth?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
4 digits	The 4 digits of year of birth

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept The respondent's year of birth
- Technical issues -

Rationale

The information provided to this variable is complementary to the variable 'Birth month'. Both variables are combined in order to calculate the age of the respondent. 'Age' is a basic parameter in survey data analysis since it allows comparison within the same population sub-group as well as between different sub-groups.

Issues and developments

The respondent's age is calculated with the following formula:

$$\text{AGE} = \text{int}(((\text{REFYEAR} * 12 + \text{REFMONTH}) - (\text{BIRTHYEAR} * 12 + \text{BIRTHMONTH})) / 12)$$

It is therefore of utmost importance to select individuals aged 25 to 64 at the time of interview.

Good practices

Data collection through interviews or registers

BIRTHMONTH: Month of birth

Short description

Month of birth of the person

Standard question

What is your month of birth?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept The respondent's month of birth.
- Technical issues -

Rationale

The information provided to this variable is complementary to the variable 'Birth year'. Both variables are combined in order to calculate the age of the respondent. 'Age' is a basic parameter in survey data analysis since it allows comparisons within the same population group as well as between different population groups.

Issues and developments

The respondent's age is calculated with the following formula:

$$\text{AGE} = \text{int}(((\text{REFYEAR} * 12 + \text{REFMONTH}) - (\text{BIRTHYEAR} * 12 + \text{BIRTHMONTH})) / 12)$$

It is therefore of utmost importance to select individuals aged 25 to 64 at the time of interview.

Good practices

Data collection through interviews or registers

CITIZEN: Citizenship

Short description

Citizenship is defined as the particular legal bond between an individual and his/her state, acquired by birth or naturalisation, whether by declaration, option, marriage or other means according to the national legislation.

Standard question

What is your citizenship?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
0	Same as country of residence
2 digits	Based on the ISO country classification; codes provided in the Annex 5 of the AES manual
-1	No answer

- Classification used In the field work, classification of country of citizenship should be done on the basis of the Commission Regulation (EC) No 1201/2009 of 30 November 2009 implementing Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topic and of their breakdowns. This classification is compatible with the harmonised code list proposed by Eurostat.

Definition

- Filter None
- Reference period At the time of interview or reference date of survey.
- Concept
Citizenship is defined as the particular legal bond between an individual and his/her state, acquired by birth or naturalisation, whether by declaration, option, marriage or other means according to the national legislation.
National: Resident person having citizenship of the country of residence (= country of survey/enumeration).
Non-national (foreigners): Resident person who does not have citizenship of the country of residence (= country of survey/enumeration).
The information sought is the country of current citizenship of the person concerned. Information on country of citizenship should be obtained in accordance with the administrative status/legal situation existing at the time of data collection.
- Technical Issues
It is recommended that the country of citizenship is recorded during interview while more aggregated classification according to transmission codes will be used for transmission of data.
A person with two or more citizenships shall be allocated to only one country of citizenship, to be determined in the following order of precedence:
1. reporting country, or
2. if the person does not have the citizenship of the reporting country: other EU Member State; or

3. if the person does not have the citizenship of another EU Member State; other country outside European Union.

In other cases (e.g. dual citizenship where both countries are within the European Union by neither is the reporting country) person may choose which country of citizenship will be recorded in survey.

Rationale

This item will identify nationals and non-nationals according to their legal links to the country of residence and will permits comparison of residents. In the context of free movement of people across the EU it is important to be able to examine the relationship between migration and, for example, employment or social exclusion.

Issues and developments

Citizenship at birth, and the way how the national citizenship was acquired, either at birth or by naturalisation or other means according to the national legislation and the year of acquisition, can be a useful supplement for surveys seeking more detailed analysis of integration processes and outcomes of immigrants and their descendants.

Good practices

- o Data collection through interviews or registers.

The "Conference of European Statisticians Recommendations for the 2010 Censuses of Population and housing" (UN 2006⁹) par. 369 stated that "*in all topics related to international borders (country of birth, country of birth of parents, country of citizenship and country of previous/current residence) reference should be made to the boundaries existing at the time of the census*". This is for purposes of international comparability as stated in the par. 374 of the recommendations. The recommendations par. 370 suggest to provide "*complementary tabulations on the population stocks relevant to international migration should be provided, distinguishing the persons who migrated before the break-up of the former country from those who did so after the break-up*".

In statistics with annual or other frequent regularity, for better comparability it is reasonable to consider these boundaries as existing on 1 January of the reference (survey) year. It is particularly important in case where, due to changes of borders, two people born in the same place may appear as born in different countries (as seen from the point of the reporting country).

Rules for special cases of citizenship are the following:

- a. stateless people must be considered under non-EU;
- b. recognized non-citizens (special category mainly to those with former Soviet Union citizenship) must be considered in the group non-EU but among other European countries (as the Soviet Union was formerly considered among European countries);
- c. in case of formerly existing citizenship, where possible, the current situation should be taken into account. Thus, for example, ex-Czechoslovakian citizens can be considered as EU citizens while ex-Soviet Union citizens must be counted under non-EU.

However, in many cases it may not be possible to consider the current geo-political situation for people with formerly existing citizenships, simply because there is no information as to which citizenship the person may potentially have. Then, the classification can only be done using the names of these former countries. Generally, these cases must be included under non-EU, except citizenship of former Czechoslovakia that is potentially citizenship of one current EU Member State and therefore can be classified among EU citizens.

⁹ http://www.unece.org/fileadmin/DAM/stats/publications/CES_2010_Census_Recommendations_English.pdf

It is important to record the country of citizenship and not just the citizenship of a person in terms of an adjective (for example, Chinese, German, British and so forth) in order to avoid confusion between ethnic background and citizenship.

BIRTHPLACE: Country of birth

Short description

Country of birth is the country of usual residence of the mother at the time of the birth.

Standard question

What is your country of birth?

Coding

- Transmission codes

Codes	Labels
0	Born in this country
2 digits	Based on the ISO country classification; codes provided in the Annex 5 of the AES manual
-1	No answer

- Classification used In the field work, classification of country of birth should be done on the basis of the Commission Regulation (EC) No 1201/2009 of 30 November 2009 implementing Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topic and of their breakdowns. This classification is compatible with the harmonised code list proposed by Eurostat.

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept
The respondent's country of birth
Country of birth is defined as the country of residence of the mother at the time of birth. For people born outside the country, it is sufficient to ask for the country of residence of the mother at the time of birth.
Based on the respondent's country of birth, the following division may be made:
 - Native-born: person born in the country of residence (country of survey/enumeration).
 - Foreign-born: person born in other country than country of residence (country of survey/enumeration).Information on country of birth should be obtained in accordance with the national boundaries existing at the time of data collection.
- Technical issues
Even if the country of birth is the country where the survey takes place, it should still be reported.
It is recommended that the questions related to country of birth directly target country of birth (or country of usual residence of mother) at the time of birth. This remark is relevant in case borders have changed since then. More aggregated classification according to transmission codes will then be used for transmission of data. See *Good practices* below.

If possible the exact country should be indicated; where this is not possible, one of the general groupings in bold print should be used. Member States must be coded individually.

Rationale

This item will identify migrants to a country and will permit analysis comparing the circumstances of migrants to native-born residents. In the context of free movement of people across the EU it is important to be able to examine the relationship between migration and, for example, employment or social exclusion. Of course, the AES sample sizes will not be sufficient for detailed breakdowns on this issue.

Issues and developments

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Good practices

- Data collection through interviews or registers.

The "Conference of European Statisticians Recommendations for the 2010 Censuses of Population and housing" (UN 2006¹⁰) par. 369 stated that "*in all topics related to international borders (country of birth, country of birth of parents, country of citizenship and country of previous/current residence) reference should be made to the boundaries existing at the time of the census*". This is for purposes of international comparability as stated in the par. 374 of the recommendations. The recommendations par. 370 suggest to provide "*complementary tabulations on the population stocks relevant to international migration should be provided, distinguishing the persons who migrated before the break-up of the former country from those who did so after the break-up*".

In statistics with annual or other frequent regularity, for better comparability it is reasonable to consider these boundaries as existing on 1 January of the reference (survey) year. It is particularly important in case where, due to changes of borders, two people born in the same place may appear as born in different countries (as seen from the point of the reporting country).

However, there are several cases when it is difficult or not acceptable for the reporting country to strictly follow above mentioned recommendations. The UNECE recommendations on 2010 censuses explicitly say in par. 370, that if the boundary of country of birth changed, person will not become foreign-born (and accordingly is not immigrant).

Therefore the following interpretation is to be considered:

- If the place where the person was born belonged to another country at the time of birth but currently it is a part of the country where person lives, then this person shall be considered as native-born according current borders.
- If this person was born in the territory that was at the time of birth part of his/her country of origin (e.g. his/her citizenship or residence) but is not any more due to changed borders, the name of his or her country of birth is still the same as at the time of the birth. In this case the country of birth is enumerated as at the boundaries at the time of birth. If this country is currently the country of usual residence of the person, he or she shall be considered as native-born in this country.

Generally, there are cases where countries may be interested to consider current boundaries and others where the borders at the time of birth are preferred (or acceptable):

A. The following are situations when current borders and name of country of birth should be possible to apply without difficulties:

- 1) a person was born in a place that has always been part of the geo-political territory of the same country – no change;

¹⁰ http://www.unece.org/fileadmin/DAM/stats/publications/CES_2010_Census_Recommendations_English.pdf

2) a person was born in a place that, at the time of birth, belonged to a country that due to geo-political change became an another independent country – change of the name of the country.

3) a person was born in a place that, at the time of birth, belonged to a concretely definable dependent part of a country that due to geo-political change became an independent country – change of the name of country.

B. The situations where it is difficult or impossible to define the place of birth according current borders:

1) a person was born in a place that, at the time of birth, belonged to a country that does not exist and due to lack of detailed information cannot be located on the map of current geographical territories of countries:

a. only the country of birth at the time of birth is known;

b. it is not known in which country the settlement or town of birth currently belongs.

C. The cases where countries may have interest not to consider current borders:

1) a person currently living in its territory was born in a place that belonged to this country at the time of birth of this person but which, due to boundary changes, is no longer part of the country.

D. The cases where countries are interested to consider current borders:

1) a person was born at a place that was outside of the territory at the time of birth but currently belongs to this country.

RESTIME: Years of residence

Short description

The respondent's years of residence in this country

Standard question

How many years have you been living in this country?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Been in this country for one year and less
2-10	Number of years for person who has been in this country for 2 to 10 years
11	Been in this country for more than 10 years
-1	No answer
-2	Not applicable (BIRTHPLACE = 0)

- Classification used Not applicable

Definition

- Filter All respondents who are not born in this country
- Reference period No specific reference period should be mentioned (see concept)
- Concept The respondent's years of residence in this country
- Technical issues The years of residence should be calculated taking as starting point the last entrance in the country. For people with up to one year's residence in this Member State, 1 should be coded; between one year and two years, 2; and so on up to 10 for people with up to ten years of residence. All people already resident for over ten years should be coded 11.

Rationale

This variable may be used to analyse the integration of migrants in the labour market according to the length of stay in the Member State.

Issues and developments

-

Good practices

Data collection through interviews.

MARSTADEFACTO: De facto marital status (consensual union)

Short description

The respondent's de facto marital status (consensual union)

Standard question

What is your de facto marital status? (Are you living in a consensual union?)

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Person living in a consensual union
2	Person not living in a consensual union
-1	No answer

- Classification used Not applicable

Definition

- Filter None
- Reference period Current status at the time of interview or reference date of survey
- Concept
The respondent's de facto marital status (consensual union)
De facto marital status is defined as the marital status of each individual in terms of his or her actual living arrangements within the household.
Consensual union is defined here as people living in the same household as their partner, the union being with or without a legal basis.
- Technical issues
It was recommended by the AES Task Force to remove the variable MARSTALEGAL following the recommendations endorsed by the Directors of Social Statistics.
As MARSTALEGAL is not collected anymore, people who are legally married are coded as people in a consensual union.

Rationale

Marital status with other demographic variables, like sex and age, is often used to classify and to base other information collected by census or survey to help in the understanding of various issues.

Increasing number of countries experienced increases of the number of people living in consensual unions. In some countries it is already possible to identify registered partnerships as this category may have status equivalent to legal marriage. The extent to which couples form consensual unions rather than formally marry varies across EU member states. In terms of the practical aspects of daily life living in consensual union does not significantly differ from the living with married or registered partner. Accordingly, collecting data only on the 'legal marital status' does not allow fully define family and identify family composition.

Issues and developments

As the distinction between the two concepts of marital status – 'legal marital status' and 'de facto marital status' – is becoming vague, a simplification by integrating the two variables into one is considered in the 2016 AES.

It was recommended by the AES Task Force to remove the variable MARSTALEGAL following the recommendations endorsed by the Directors of Social Statistics.

As MARSTALEGAL is not collected anymore, people who are legally married are coded as people in a consensual union.

The name of the variable collecting information on the situation of a couple is still named MARSTADEFACTO but what we want to collect through the variable is 'the cohabitation' status.

Thus, the variable MARSTADEFACTO should take into account the consensual unions with or without a legal basis, where the consensual union with a legal basis includes both married couples and registered partners.

This variable integrates both concepts 'legal marital status' and 'consensual union'. The combination of the two concepts still enables to know whether the respondents live in a partnership and in the same household as their partner.

Good practices

- Data collection through interviews or registers
- The sensitivity of the information particularly in the case of same-sex partnership should be considered.

HATLEVEL: Educational attainment

Short description

The respondent's highest level of education or training successfully completed

Standard question

What is your highest level of education or training successfully completed?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
000	No formal education or below ISCED 1
100	ISCED 1
200	ISCED 2 (including ISCED 3 programmes of a duration which is less than 2 years)
302	ISCED 3 programme duration of 2 years and more, sequential (i.e. access to next ISCED 3 programme only)
303	ISCED 3 programme duration of 2 years and more, terminal or access to ISCED 4 only
304	ISCED 3 with access to ISCED 5, 6 or 7
300	ISCED 3 programme duration of 2 years and more, without possible distinction of access to other ISCED levels
400	ISCED 4
500	ISCED 5
600	ISCED 6
700	ISCED 7
800	ISCED 8
-1	No answer

- Classification used International Standard Classification of Education ([ISCED](#)) 2011

Definition

- Filter None
- Reference period Moment of the interview
- Concept Highest level of education/training successfully completed
- Technical issues 'Highest level of education completed' means level successfully completed and must be associated with obtaining a certificate or a diploma. In cases where there is no certification, successful completion must be associated with full attendance. When determining the highest level, both general and vocational education should be taken into consideration.
 - People who have not completed their studies should be coded according to the highest level they have completed (not be coded with a blank).
 - People still in education have to indicate their last level of education successfully finished.
 - People with no education (illiterate) should be coded 000.
 - Code 300 should only be used in those cases in which a distinction between 302, 303 or 304 of ISCED level 3 is not possible.

Rationale

The importance of educational level of people for their social position is largely recognised. A higher level of education generally creates more favourable employment prospects and consequently opens up the possibility for better living conditions. For the young people, educational attainment plays an important role in their start in adult life because of nowadays' economy exigencies for skills which become higher and higher. Educational attainment level of the young people and percentage of early leavers from education and training are two of five benchmarks used in evaluation of the progress of the Lisbon strategy. Many national and European programmes try to give more opportunities to the people to improve their knowledge and skills by raising the level of initial education and by promoting participation in lifelong learning.

Issues and developments

The educational attainment of the respondent is implemented through the ISCED 2011.

The ISCED integrated mappings, listing national formal educational programmes and qualifications (including all programmes covered by the UOE-questionnaire), should be a basis for allocation of the national programmes – via ISCED 2011 – to the codes of this variable.

Level 4 may not exist in some countries. Please check your national ISCED mapping.

Good practices

- Data collection through interviews or registers.

Coding of the national educational levels using more detailed coding in ISCED when possible could be considered as a good practice.

The question about educational attainment can be asked as an open question in a survey and recoded afterwards or directly coded according to the national list of educational programmes. Information can be obtained from registers as well.

It should be recommended to avoid proxies (the use of proxies can be difficult to determine educational level of older people, of migrants or of people whose participation in formal/non-formal education programmes is uncertain for the person interviewed). Answer cards on which all categories of all relevant formal education and training programmes are listed can be used.

HATFIELD: Field of the highest level of education or training successfully completed

Short description

The field of the respondent's highest level of education or training that is successfully completed

Standard question

What is the field of your highest level of education or training successfully completed?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
00	Generic programmes and qualifications
01	Education
02	Arts and humanities
03	Social sciences, journalism and information
04	Business, administration and law
05	Natural sciences, mathematics and statistics
06	Information and Communication technologies (ICTs)
07	Engineering, manufacturing and construction
08	Agriculture, forestry, fisheries and veterinary
09	Health and welfare
10	Services
99	Unknown
-1	No answer
-2	Not applicable (HATLEVEL ≠ 300 to 800)

- Classification used Classification of fields of education and training, at level 1 of the classification. Subdivisions of the classification of fields of education and training can be used on an optional basis.

The version used for 2016 AES is the 2013 ISCED Fields of Education Classification. Full classification available on the following link: <http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf>

Definition

- Filter All respondents with an ISCED3 to ISCED8 completed education level (HATLEVEL = 300 (or 302 or 303 or 304) to 800)
- Reference period No specific reference period should be mentioned (see concept)
- Concept Field of highest level of education or training successfully completed
Field of education or training is a classification of subject matters taught in an educational programme. The classification can be used to classify the main contents of educational programmes which contain a number of subjects. Then, the time spent on each subject is the main criteria for classification of the whole programme.

- Technical issues -

Rationale

The knowledge of the field of the highest educational level attained is used in the analysis of the matching between education schemes and labour market needs.

Issues and developments

-

Good practices

- Data collection through interviews.
- If the interviewer cannot code the answer with one of the codes presented above, an open answer and post-coding is recommended.

HATYEAR: Year of completion of the highest level of education or training

Short description

Year when the respondent's highest level of education or training was successfully completed

Standard question

What year did you complete your highest level of education or training?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
4 digits	The four digits of the year when highest level of education or training was successfully completed are entered
-1	No answer
-2	Not applicable (HATLEVEL = 000, -1)

- Classification used Not applicable

Definition

- Filter All respondents who have successfully completed any level of education or training (from ISCED1 to ISCED8)
- Reference period No specific reference period should be mentioned (see concept)
- Concept Year when highest level of education or training was successfully completed. The expression "level successfully completed" must be associated with obtaining a certificate or a diploma, when there is a certification. In cases where there is no certification, successful completion must be associated with full attendance.
- Technical issues If the individual has more than one degree at this level, the year entered is the year of acquisition of the earliest of these degrees.
In case the respondent does not know the exact date (e.g. in case of a proxy), an estimation should be provided.

Rationale

This variable may be used for analysis of the transition from school to work of the young people.

Issues and developments

-

Good practices

Data collection through interviews.

HATVOC: Orientation of the highest level of education or training successfully completed

Short description

Orientation of the respondent's highest level of education or training successfully completed

Standard question

What is the orientation of your highest level of education or training successfully completed, i.e. general or vocational education?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	General education
2	Vocational education
-1	No answer
-2	Not applicable (HATLEVEL \neq 300 to 400 or (REFYEAR - HATYEAR) $>$ 20)

- Classification used Not applicable

Definition

- Filter All respondents with an ISCED3 to ISCED4 education level (HATLEVEL = 300 to 400) that was completed within the last 20 years before the year of interview ((REFYEAR - HATYEAR) \leq 20)

- Reference period No specific reference period should be mentioned (see concept)

- Concept The following concepts are described in the 2011 ISCED manual (articles 54 and 55) as such:

General education is defined as education programmes that are designed to develop learners' general knowledge, skills and competencies, as well as literacy and numeracy skills, often to prepare participants for more advanced education programmes at the same or a higher ISCED level and to lay the foundation for lifelong learning. These programmes are typically school- or college-based. General education includes education programmes that are designed to prepare participants for entry into vocational education but do not prepare for employment in a particular occupation, trade or class of occupations or trades, nor lead directly to a labour market-relevant qualification.

Vocational education is defined as education programmes that are designed for learners to acquire the knowledge, skills and competencies specific to a particular occupation, trade, or class of occupations or trades. Such programmes may have work-based components (e.g. apprenticeships, dual-system education programmes). Successful completion of such programmes leads to labour market-relevant, vocational qualifications acknowledged as occupationally-oriented by the relevant national authorities and/or the labour market.

- Technical issues -

Rationale

This variable is needed to provide breakdowns and specification of indicators by orientation of education and for more specifically look at graduates from Vocational Education and Training (VET). Based on the EU policy context as specified under the Copenhagen process and more recently under the Bruges Communiqué, it is important to monitor participation of VET graduates in further education and training. This is to ensure that VET does not constitute a dead end in learning pathways and that VET graduates are trained to keep up with technological and organisational innovation as well as with more general labour market changes and developments.

Issues and developments

-

Good practices

- Data collection through interviews.
- The collection of information on educational attainment through the diploma approach (as recommended in the LFS) is a good practice. Such approach may provide useful information on level and orientation of education as well, on the basis for instance of available lists of formal qualifications.
 - In case there is a unique and direct question for collecting the orientation (i.e. where the recommended diploma approach is not adopted) another good (second best) practice is that countries add the following statement to the suggested question: 'Vocational means it is designed for acquiring knowledge skills and competencies closely linked to particular occupations or trades'.
 - In some countries, there are some programmes/qualifications with a national name/label making reference to technical education and which by ISCED standard are typically vocational. Both in LFS and AES they should be classified as vocational as long as they meet the definition of vocational education.

DROPEduc: Formal education or training abandoned

Short description

Formal education or training abandoned

Standard question

Is there any educational programme that you started but then stopped without completing? (in case several programmes abandoned, report the programme with the highest level)

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (HATLEVEL = 000, -1 or (REFYEAR - HATYEAR) > 20)

- Classification used Not applicable

Definition

- Filter All respondents with an educational level from ISCED1 to ISCED8 (HATLEVEL \neq 000, -1) that have successfully completed their education or training within the last 20 years before the year of interview ((REFYEAR - HATYEAR) \leq 20)
- Reference period No specific reference period should be mentioned (see concept)
- Concept Educational programmes at level inferior to HATLEVEL can be reported.
In case several programmes have been abandoned, the programme reported should be the one with the highest level (ISCED level).
- Technical issues -

Rationale

This variable is needed to target the early leavers from education and training, drop-outs.

Issues and developments

2016 AES will not collect DROPHIGH anymore (as in 2011 AES). It is substituted by this related but slightly different variable (DROPEduc).

Good practices

- Data collection through interviews.
- In case several programmes have been abandoned, the programme with the highest level should be reported. In case several programmes have been abandoned at that level of education (for instance from both general and vocational education), then the most recent one should be reported.

- Answer cards can be used on which categories of all relevant formal education programmes are listed. This programme category approach could be developed in a way which would enable to collect information on level and orientation of education. For instance the approach with show cards could help identify specific programme categories or even specific programmes, in a way that makes possible to derive information about their level and orientation.

DROPELEVEL: Level of the formal education or training abandoned

Short description

Level of the formal education or training abandoned

Standard question

What was the level of this programme? (in case several programmes abandoned, report the programme with the highest level)

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
100	ISCED 1
200	ISCED 2 (including ISCED 3 programmes of a duration which is less than 2 years)
302	ISCED 3 programme duration of 2 years and more, sequential (i.e. access to next ISCED 3 programme only)
303	ISCED 3 programme duration of 2 years and more, terminal or access to ISCED 4 only
304	ISCED 3 with access to ISCED 5, 6 or 7
300	ISCED 3 programme duration of 2 years and more, without possible distinction of access to other ISCED levels
400	ISCED 4
500	ISCED 5
600	ISCED 6
700	ISCED 7
800	ISCED 8
-1	No answer
-2	Not applicable (DROPELEVEL ≠ 1)

- Classification used International Standard Classification of Education ([ISCED](#)) 2011

Definition

- Filter All respondents who have started an educational programme and stopped it without completing it (DROPELEVEL = 1)
- Reference period No specific reference period should be mentioned (see concept)
- Concept Level of the highest formal education not completed
The concept and coding of this variable is similar to the variable 'Formal education or training abandoned'.
- Technical issues These are similar to the technical issues mentioned in the variable 'Formal education or training abandoned'.

Rationale

The variable is needed to provide breakdowns and specification of early leavers/drop out by level of education.

Issues and developments

-

Good practices

- Data collection through interviews.
- In case several programmes have been abandoned, the programme with the highest level should be reported. In case several programmes have been abandoned at that level of education (for instance from both general and vocational education), then the most recent one should be reported.
- Answer cards can be used on which categories of all relevant formal education programmes are listed. This programme category approach could be developed in a way which would enable to collect information on level and orientation of education. For instance the approach with show cards could help identify specific programme categories or even specific programmes, in a way that makes possible to derive information about their level and orientation.

DROPEUCVOC: Orientation of the formal education or training abandoned

Short description

Orientation of the formal education or training abandoned

Standard question

What was the orientation of this programme, i.e. general or vocational education?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	General education
2	Vocational education
-1	No answer
-2	Not applicable (DROPEUCLEVEL \neq 300 to 400 or (REFYEAR - HATYEAR) > 20)

- Classification used Not applicable

Definition

- Filter All respondents with an educational level from ISCED3 to ISCED4 (DROPEUCLEVEL = 300 to 400) that have completed their highest educational level within the last 20 years before the year of interview ((REFYEAR - HATYEAR) \leq 20)
- Reference period No specific reference period should be mentioned (see concept)
- Concept Orientation of the formal education or training abandoned
The concept of this variable is similar to the concept mentioned in variable 'Formal education or training abandoned'.
- Technical issues -

Rationale

The variable is needed to provide breakdowns and specification of early leavers/drop out by orientation (from general and vocational education).

Issues and developments

See educational attainment

Good practices

- Data collection through interviews.
- In case several programmes have been abandoned, the programme with the highest level should be reported. In case several programmes have been abandoned at that level of education (for instance from both general and vocational education), then the most recent one should be reported.

MAINSTAT: Main current labour status

Short description

The respondent's main current labour status

Standard question

What is your main current labour status (based on the main job)?

or

Do you carry out a job or profession, including unpaid work for a family business or holding, an apprenticeship or paid traineeship, etc.?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
11	Full time
12	Part time
20	Unemployed
31	Pupil, student, further training, unpaid work experience
32	In retirement or early retirement or has given up business
33	Permanently disabled
34	In compulsory military service
35	Fulfilling domestic tasks
36	Other inactive person
-1	No answer

- Classification used Not applicable

Definition

- Filter None
- Reference period Time of the interview
- Concept The respondent's main **current** labour status

This variable indicates the labour status of the respondent at the moment of the interview according to the categories listed above. It captures the person's own perception of their main activity at present. The present variable differs from the ILO¹¹ concept to the extent that people's own perception of their main status differs from the strict definitions used in the ILO definitions. For instance, many people who would regard themselves as full-time students or homemakers may be classified as ILO-employed if they have a part-time job. Similarly, some people who consider themselves 'unemployed' may not meet

¹¹ According to the International Labour Organisation, employed people are those aged 15 years and over who during the reference week did any work for pay, profit or family gain for at least one hour, or were not at work but had a job or business from which they were temporarily absent because of, e.g., illness, holidays, industrial dispute and education or training. Unemployed people comprise people aged 15 to 74 who were without work during the reference week, were currently available for work and were either actively seeking work or who found a job to start within the next three months.

the strict ILO criteria of taking active steps to find work and being immediately available.

It is also broader than the ILO definition in a number of respects. The term 'normal' refers to disregarding purely transient or other temporary changes in the situation, and to an averaging over time in case of fluctuations (such as over 4 weeks preceding the interview). Despite a certain degree of vagueness, the concept of 'normal' is useful and is widely employed in social research.

The concept of '*current*' implies that any definitive changes in the activity situation are taken into account. For instance, if a person has lost a job or has retired recently, or the activity status has changed otherwise in a definitive manner, then the situation as of the time of the interview should be reported. In this sense, '*current*' overrides any concept of averaging over any specific reference period.

- Technical issues The distinction between full-time and part-time work should be made on the basis of a **spontaneous answer** given by the respondent. It is impossible to establish a more exact distinction between part-time and full-time work, due to variations in working hours between Member States and also between branches of industry.
 - A **part-time worker** is “an employed person whose normal hours of work are less than those of comparable full-time workers” (International Labour Conference, 81st session, 1994).
 - The variable refers to the main job.
 - In case respondents hesitate between the answers 'permanently disabled' and 'in retirement', the code 'in retirement' should be privileged for people having reached the most frequent legal retirement age or the one in their previous occupation.
 - The code 'in compulsory military' might not be relevant any longer in certain countries.

Rationale

The person's main economic situation is a useful variable. It is the only practical definition to use in examining labour transitions, as it could be done in a panel survey or using a similar variable for the situation one year before.

In addition, it permits an important classification of the regular nature of the work or the main reason for not working as opposed the situation in one specific reference week as in the LFS. For those outside the labour force at present, the nature of their present activity has an important bearing on their likely future labour market participation. People who are retired or unable to work because of disability, for instance, are less likely to respond to an increase in demand for labour than are students or those engaged in home duties.

Issues and developments

- Self-declared versus International Labour Office concept: it was recognised that the high objectivity and comparability of the ILO status cannot overcome its inadequate number of questions and obvious burden on respondents for a too high degree of precision. However, the task force agreed that there was space for improvements of the self-declared status as concerns unemployed people and the criteria of active search for work. A preliminary analysis on the LFS data shows large discrepancies in many countries between the self-declared and the ILO definition of unemployment.
- Distinction full-time/part time: although it implies a slight increase in burden for respondents, this dimension can bring additional information either in terms of time available, or in terms of possible lower labour integration and wage.

- Categories of inactivity: some of them represent only a limited percentage of the population. They still need to be covered for the interviews since some respondents would find it difficult to classify themselves in other categories.

Good practices

- Data collection through interviews.

When collected via interview, the question should not in any case precede the questions on the labour status according to the ILO definition or questions on the registration at the public employment office.

EMP12M: Employed during the last 12 months

Short description

Employment at any point in time during the last 12 months

Standard question

Did you carry out a job or profession at any time during the last 12 months, including unpaid work for a family business or holding, an apprenticeship or paid traineeship, etc.)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (MAINSTAT = 11, 12)

- Classification used Not applicable

Definition

- Filter All respondents who are not in employment at the time of the interview (MAINSTAT \neq 11, 12).
- Reference period The reference period is 12 months prior to the interview like the specific questions on the participation in education and training (see concept)
- Concept The aim is to know whether the respondent has been in employment at least at one point in time during the last 12 months. Indeed, the variable MAINSTAT gives the labour status at the time of the interview. Therefore if the respondent worked before the interview but has just become unemployed, the variable MAINSTAT on its own is not enough to properly depict the situation of the respondent during the last 12 months.
- Technical issues This variable, together with MAINSTAT, can help to better compute the indicators on Continuing Vocational Training in enterprises.

'No answer' to MAINSTAT will most likely lead to 'No answer' for EMP12M, therefore code 'No answer' for MAINSTAT (i.e. MAINSTAT= -1) is not included in the filter for 'Not applicable'.

Rationale

-

Issues and developments

-

Good practices

Data collection through interviews.

JOBSTAT: Professional status

Short description

The respondent's professional status

Standard question

What is your professional status (based on the main job)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
11	Self-employed with employees
12	Self-employed without employees
21	Employee with a permanent job or work contract with unlimited duration
22	Employee with a temporary job or work contract with limited duration
30	Family worker
-1	No answer
-2	Not applicable (MAINSTAT ≠ 11, 12)

- Classification used Not applicable

Definition

- Filter All employed respondents who work either full-time or part-time (MAINSTAT = 11, 12)
- Reference period Time of the interview
- Concept The respondent's professional status regarding his/her main job

The definition is based on the ILO resolution concerning the International Classification of Status in Employment (15th ICLS, 1993). The two dimensions that are central to the concept of professional status are economic risk and authority.

The basic distinction is that between *employees* and the *self-employed*.

Employees are all those workers who hold the type of job defined as "paid employment jobs" – "jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration which is not directly dependent upon the revenue of the unit for which they work (this unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be owned by others, and the incumbents may work under direct supervision of, or according to strict guidelines set by the owner(s) or people in the owners' employment. People in "paid employment jobs" are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments such as food, housing or training.

Self-employment jobs are those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The self-employed make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the

welfare of the enterprise. In this context "enterprise" includes one-person operations.

- Technical issues The following definitions are provided to facilitate the classification of 'Professional status':
 - **Self-employed people with employees** are defined as people who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ at least one other person. If people working in the business, professional practice or farm are not paid then he/she should be considered as self-employed without staff.
 - **Self-employed people without employees** are defined as people who work in their own business, professional practice or farm for the purpose of earning a profit, and who do not employ any other person. Nevertheless he may engage members of his/her own family or apprenticed without payment. In this category one can find farmers working alone or using the assistance of members of family.
 - **Employees with a limited duration job/contract** are employees whose main job will terminate either after a period fixed in advance, or after a period not known in advance, but nevertheless defined by objective criteria, such as the completion of an assignment or the period of absence of an employee temporarily replaced.
 - **Family workers** are people who help another member of the family to run an agricultural holding or other businesses, provided they are not considered as employees. People working in a family business or on a family farm without pay should be living in the same household as the owner of the business or farm, or in a broader interpretation, in a house located on the same plot of land and with common household interests. Such people frequently receive remuneration in the form of fringe benefits and payments in kind. However, this applies only if the business is owned or operated by the individual themselves or by a relative. Thus, unpaid voluntary work done for charity should be excluded.

Rationale

'Professional status' is associated with life chances in a number of important ways. People who are self-employed benefit directly from the level of profit made by the business or enterprise. On the other hand, they are generally more exposed than employees to economic risk, in that their remuneration is tied more directly to the level of profit. Status in employment is also needed for the proposed European Socio-Economic Classification with the addition at a later stage of the "employers" category. Information on status in employment will also need to be collected not only for those currently at work, but also at a later stage for those who previously held a job (people who are retired, the unemployed who worked before, those who worked before but are no longer in the labour force).

Issues and developments

The additional dimension permanent/temporary contract might appear burdensome but is useful. People with temporary contracts are numerous (around 15% of employees) and are more exposed to economic risks. Definitions and technical issues are the same as the 'LFS explanatory notes'¹².

Good practices

Data collection through interviews.

¹² http://ec.europa.eu/eurostat/ramon/coded_files/EU_LFS_explanatory_notes_from_2012_onwards.pdf

JOBISCO: Occupation

Short description

The respondent's occupation

Standard question

What is your occupation (based on the main job)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
2 digits	ISCO-08 coded at 2-digit level
-1	No answer
-2	Not applicable (MAINSTAT ≠ 11, 12)

- Classification used International Standard Classification of Occupation ([ISCO-08](#))

Definition

- Filter All employed respondents who work either full-time or part-time (MAINSTAT = 11, 12)
- Reference period Moment of the interview
- Concept The respondent's occupation regarding his/her main job
 The 'main job' is defined in harmony with the Labour Force Survey definition of 'first job' (Working Group on Employment Statistics, January 2001). The LFS normally takes a reference week to define the current situation of the respondent but the main status should be here considered. Multiple job holders decide for themselves which job is to be considered as the main job. In doubtful cases the main job should be the one with the greatest number of hours usually worked.
 The basis for the classification in the ISCO-08 scheme is the nature of the job itself and the level of skill required. A job is defined as the set of tasks and duties to be performed. Skills are the abilities to carry out the tasks and duties of a job. Skills consist of two dimensions: skill level and domain specialisation. The skill level is related to the level of educational attainment.
- Technical issues The questions needed for the classification by occupation are the job title associated with the main job and a further description of the tasks and duties.
 For a few occupations, information on size group of workplace (the local unit of activity) is needed to code ISCO-08.

Rationale

It is generally recognised that the type of work performed can have a great influence on the living conditions of the individual and household. Hence, "social stratification" and "social mobility" researchers pay attention to the type of job as a central element in studies of inequalities of opportunities and results, and their reproduction over life cycles and generations.

Information on characteristics of the job and on social class have two uses: in studying deprivation and social exclusion such variables are used as covariates in the models, while in studying the labour market they have the role of dependent variables.

Occupation is a major classifying variable, and is also used as input into various socio-economic classification schemes.

Issues and developments

- ISCO level recommended

Two digits is the requirement achievable for all surveys: the implementation of the collection at one digit level would not provide sufficient quality (level 1 is not appropriate for a direct collection). Level 2 is already implemented in most surveys and would constitute the level required for interviews. For register based data, ISCO is often coded at an even more precise level.

A shorter coding list could be studied in the case of reduced breakdowns (manual/non manual, skilled/unskilled) prove to be of better quality in such surveys. However, the needs for more details in certain categories would need to be checked for the implementation of the classification ESeC (European Socio-economic Classification).

- Quality of ISCO

There is not yet complete information at Eurostat on the way ISCO is collected or derived in each country and survey. Due to the numerous comparability issues for certain ISCO categories across countries, specific actions should be launched at EU level to ensure comparable ISCO data. This should be done in parallel to the implementation of the 2008 ISCO version.

- Coverage of the variable: people not currently working (last job)

The burden on respondents to cover people not currently working would be too high although it is relevant for certain surveys like the LFS, EU-SILC or EHIS. It would be needed for the full version of the classification 'ESeC': people not long-term unemployed are defined according to their previous job in the ESeC.

Good practices

- Data collection through interviews.
- Two digits is the requirement achievable for all surveys although the implementation at a more detailed level in the field work could be considered as a good practice.

LOCNACE: Economic activity of the local unit

Short description

Economic activity of the local unit where the respondent is employed (incl. self-employed).

Standard question

What is the economic activity of the local unit where you are employed?

Coding

- Transmission codes

Codes	Labels
2 digits (01 to 99)	NACE Rev.2 coded at 2-digit level
-1	No answer
-2	Not applicable (MAINSTAT ≠ 11, 12)

- Classification used NACE Rev.2

Definition

- Filter All employed respondents who work either full-time or part-time (MAINSTAT = 11, 12)
- Reference period No specific reference period should be mentioned (see concept)
- Concept Economic activity of the local unit where the individual carries out his/her main professional activity.
- Technical issues Where information for the 'local unit' is not available, the 'enterprise' can serve as a proxy. This approximation can be relevant for countries where the information can be derived from registers (for example by linking the respondent via a national register number to an enterprise by using a social security register).
Where the local unit or enterprise has more than one 'economic activity', the dominant should be retained. The ideal measure for determining the dominant activity would be the *number of employees* for the different activities, rather than more economical concepts like *added value* or *turnover*.
The "local unit" to be considered is the geographical location where the job is mainly carried out or, in the case of itinerant occupations, can be said to be based; normally it consists of a single building, part of a building, or, at the largest, a self-contained group of buildings. The "local unit" is therefore the group of employees of the enterprise who are geographically located at the same site.

Rationale

The activity sector in which people are employed is a key descriptor for labour market analysis (including issues linked to skills, mobility of workers, quality of the job, etc.) and together with the occupation (ISCO) and the type of contract is very useful to describe the socio economic status of individuals.

Issues and developments

-

Good practices

- Data collection through interviews.
- Ideally, information coming from the employer or the business register should be used. However, in most cases the information will be obtained using a self-assessment question in the interview. The interviewer can introduce the answering categories to the respondent or can ask for the sector of activity where he/she is employed and attribute the appropriate code.

LOCSIZEFIRM: Number of people working at the local unit

Short description

The number of people working at the local unit where the respondent is employed

Standard question

How many people are working at the local unit where you are employed?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	1 to 9 people
2	10 to 19 people
3	20 to 49 people
4	50 to 249 people
5	250 people or more
7	Do not know precisely but 10 or more people
-1	No answer
-2	Not applicable (JOBSTAT ≠ 11, 21, 22, 30)

- Classification used Not applicable

Definition

- Filter All employed respondents who work either full-time or part-time (MAINSTAT = 11, 12) but are not self-employed without employees (JOBSTAT = 11, 21, 22, 30)
- Reference period No specific reference period should be mentioned
- Concept The size of the local unit where the respondent is employed
The local unit is an enterprise or part thereof (e.g. a workshop, factory, warehouse, office, mine, depot) situated in a geographically identified place.
The size of the local unit is determined by the number of people employed there.
- Technical issues The codes provided above permit either a reasonably exact number to be indicated (codes 1-5) or simply an indication of whether it is greater than 10 people (code 7). Employer should be included in the number of people working at the local unit.

Rationale

This variable is essential for integrated studies and comparison with business surveys (e.g. CVTS)

Issues and developments

The first category (code '1') was changed compared to the 2011 AES (it used to concern local units with up to 10 people working in the unit).

Good practices

Data collection through interviews or registers

JOBTIME: Starting year of current main job

Short description

The year in which the respondent started working in his/her current main job

Standard question

What year did you start working in your current main job?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
4 digits	4 digits of the year concerned
-1	No answer
-2	Not applicable (MAINSTAT ≠ 11, 12)

- Classification used Not applicable

Definition

- Filter All employed respondents who work either full-time or part-time (MAINSTAT = 11, 12).
- Reference period No specific reference period should be mentioned
- Concept The starting year of the respondent's current main job
- Technical issues -

Rationale

This information is valuable for estimating the degree of fluidity in the labour market and in identifying the areas of economic activity where the turnover of labour is rapid or otherwise.

Issues and developments

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Good practices

Data collection through interviews.

HATFATHER: Educational attainment of the respondent's father

Short description

The highest level of education or training that is successfully completed by the father of the respondent

Standard question

What is the highest level of education/training successfully completed by your father (male guardian)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	At most lower secondary
2	Upper secondary
3	Tertiary
-1	No answer
-2	Not applicable (father unknown)

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned
- Concept Highest level of education/training successfully completed by the father
- Technical issues Similar to the technical issues mentioned in 'HATLEVEL'
 - At most lower secondary corresponds to ISCED 2 and lower levels
 - Upper secondary corresponds to ISCED 3 and 4
 - Tertiary corresponds to ISCED 5 to 8

Rationale

The information provided in this variable is complementary to the one provided in variable 'HATMOTHER'. Both variables are useful to indicate the level of education of the parents of the respondent. Such information is important to determine the profile of the respondent as regards his/her family's educational background.

Issues and developments

See the variable HATLEVEL

ISCED level 3 programmes of partial level completion should be classified as ISCED level 3 for educational attainment in all EU surveys which collect data on educational attainment at 1-digit level of ISCED 2011, for further information see the Joint Eurostat-OECD guidelines on the measurement of educational attainment in household surveys - Annex for EU countries (<https://circabc.europa.eu/w/browse/c2dc65ad-5163-4935-b0c2-e5ea1f44929b>).

Good practices

Data collection through interviews or registers

HATMOTHER: Educational attainment of the respondent's mother

Short description

The highest level of education or training that is successfully completed by the mother of the respondent

Standard question

What is the highest level of education/training successfully completed by your mother (female guardian)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	At most lower secondary
2	Upper secondary
3	Tertiary
-1	No answer
-2	Not applicable (mother unknown)

- Classification used Not applicable

Definition

- Filter None
- Reference period No specific reference period should be mentioned
- Concept Highest level of education/training successfully completed by the mother
- Technical issues Similar to the technical issues mentioned in 'HATLEVEL'
See HATFATHER

Rationale

The information provided in this variable is complementary to the one provided in variable 'HATFATHER'. Both variables are useful to indicate the level of education of the parents of the respondent. Such information is important to determine the profile of the respondent as regards his/her family's educational background.

Issues and developments

See the variable HATLEVEL

ISCED level 3 programmes of partial level completion should be classified as ISCED level 3 for educational attainment in all EU surveys which collect data on educational attainment at 1-digit level of ISCED 2011, for further information see the Joint Eurostat-OECD guidelines on the measurement of educational attainment in household surveys - Annex for EU countries (<https://circabc.europa.eu/w/browse/c2dc65ad-5163-4935-b0c2-e5ea1f44929b>).

Good practices

Data collection through interviews.

BIRTHFATHER: Country of birth of the respondent's father

Short description

Country of birth is the country of usual residence of the mother at the time of the birth.

Standard question

What is your father's country of birth (male guardian)?

Coding

- Transmission codes

Codes	Labels
0	Born in this country
2 digits	Based on the ISO country classification; codes provided in the Annex 5 of the AES manual
-1	No answer
-2	Not applicable (father unknown)

- Classification used In the field work, classification of country of birth should be done on the basis of the Commission Regulation (EC) No 1201/2009 of 30 November 2009 implementing Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topic and of their breakdowns. This classification is compatible with the harmonised code list proposed by Eurostat.

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept The respondent's father's country of birth
Country of birth is defined as the country of residence of the father at the time of birth. For people born outside the country, it is sufficient to ask for the country of residence of the father at the time of birth.
Based on the respondent's country of birth, the following division may be made:
 - Native-born: person born in the country of residence (country of survey/enumeration).
 - Foreign-born: person born in other country than country of residence (country of survey/enumeration).Information on country of birth should be obtained in accordance with the national boundaries existing at the time of data collection.
- Technical issues Even if the country of birth is the country where the survey takes place, it should still be reported.
It is recommended that the questions related to country of birth directly target country of birth (or country of usual residence of mother) at the time of birth. This remark is relevant in case borders have changed since then. More aggregated classification according to transmission codes will then be used for transmission of data. See *Good practices* below.

If possible the exact country should be indicated; where this is not possible, one of the general groupings in bold print should be used. Member States must be coded individually.

Rationale

This item will identify migrants to a country and will permit analysis comparing the circumstances of migrants to native-born residents. In the context of free movement of people across the EU it is important to be able to examine the relationship between migration and, for example, employment or social exclusion. Of course, the AES sample sizes will not be sufficient for detailed breakdowns on this issue.

Issues and developments

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Good practices

- Data collection through interviews or registers.

The "Conference of European Statisticians Recommendations for the 2010 Censuses of Population and housing" (UN 2006¹³) par. 369 stated that "*in all topics related to international borders (country of birth, country of birth of parents, country of citizenship and country of previous/current residence) reference should be made to the boundaries existing at the time of the census*". This is for purposes of international comparability as stated in the par. 374 of the recommendations. The recommendations par. 370 suggest to provide "*complementary tabulations on the population stocks relevant to international migration should be provided, distinguishing the persons who migrated before the break-up of the former country from those who did so after the break-up*".

In statistics with annual or other frequent regularity, for better comparability it is reasonable to consider these boundaries as existing on 1 January of the reference (survey) year. It is particularly important in case where, due to changes of borders, two people born in the same place may appear as born in different countries (as seen from the point of the reporting country).

However, there are several cases when it is difficult or not acceptable for the reporting country to strictly follow above mentioned recommendations. The UNECE recommendations on 2010 censuses explicitly say in par. 370, that if the boundary of country of birth changed, person will not become foreign-born (and accordingly is not immigrant).

Therefore the following interpretation is to be considered:

- If the place where the person was born belonged to another country at the time of birth but currently it is a part of the country where person lives, then this person shall be considered as native-born according current borders.
- If person was born in the territory that was at the time of birth part of his/her country of origin (e.g. his/her citizenship or residence) but is not any more due to changed borders, the name of his or her country of birth is still the same as at the time of the birth. In this case the country of birth is enumerated as at the boundaries at the time of birth. If this country is currently the country of usual residence of the person, he or she shall be considered as native-born in this country.

¹³ http://www.unece.org/fileadmin/DAM/stats/publications/CES_2010_Census_Recommendations_English.pdf

Generally, there are cases where countries may be interested to consider current boundaries and others where the borders at the time of birth are preferred (or acceptable):

A. The following are situations when current borders and name of country of birth should be possible to apply without difficulties:

- 1) a person was born in a place that has always been part of the geo-political territory of the same country – no change;
- 2) a person was born in a place that, at the time of birth, belonged to a country that due to geo-political change became an another independent country – change of the name of the country.
- 3) a person was born in a place that, at the time of birth, belonged to a concretely definable dependent part of a country that due to geo-political change became an independent country – change of the name of country.

B. The situations where it is difficult or impossible to define the place of birth according current borders:

1) a person was born in a place that, at the time of birth, belonged to a country that does not exist and due to lack of detailed information cannot be located on the map of current geographical territories of countries:

- a. only the country of birth at the time of birth is known;
- b. it is not known in which country the settlement or town of birth currently belongs.

C. The cases where countries may have interest not to consider current borders:

1) a person currently living in its territory was born in a place that belonged to this country at the time of birth of this person but which, due to boundary changes, is no longer part of the country.

D. The cases where countries are interested to consider current borders:

1) a person was born at a place that was outside of the territory at the time of birth but currently belongs to this country.

BIRTHMOTHER: Country of birth of the respondent's mother

Short description

Country of birth is the country of usual residence of the mother at the time of the birth.

Standard question

What is your mother's country of birth (female guardian)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
0	Born in this country
2 digits	Based on the ISO country classification; codes provided in the Annex 5 of the AES manual
-1	No answer
-2	Not applicable (mother unknown)

- Classification used In the field work, classification of country of birth should be done on the basis of the Commission Regulation (EC) No 1201/2009 of 30 November 2009 implementing Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topic and of their breakdowns. This classification is compatible with the harmonised code list proposed by Eurostat.

Definition

- Filter None
- Reference period No specific reference period should be mentioned (see concept)
- Concept The respondent's mother's country of birth
See BIRTHFATHER
- Technical issues Similar to the technical issues mentioned in 'BIRTHPLACE'
See BIRTHFATHER

Rationale

The information provided in this variable is complementary to the one provided in variable 'BIRTHFATHER'. Both variables are useful to indicate the level of education of the parents of the respondent. Such information is important to determine the profile of the respondent as regards his/her family's educational background.

Issues and developments

See the variable BIRTHFATHER

Good practices

See the variable BIRTHFATHER

SEEKINFO: Seeking information about learning possibilities

Short description

This variable describes the respondent's interest to look for any information concerning learning possibilities (either on formal or non-formal education and training) during the last 12 months.

Standard question

During the last 12 months, have you looked for any information concerning learning possibilities (either on formal or non-formal education and training)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer

- Classification used Not applicable

Definition

- Filter None
- Reference period Last 12 months
- Concept Access to information about learning possibilities. This is also relevant to the concept of guidance for choosing a learning activity (e.g. course) and support during the learning activity.
Learning activities should be understood here as any education and training, that is to say any formal or non-formal learning activity.
- Technical issues -

Rationale

One important element of learning possibilities is the transparency of education and training offer (information and advice/guidance). Because of the growing interest in this issue, questions on the use of various sources of information has been included in the AES. The AES has the capacity to provide policy-relevant information on lifelong guidance through information on access to information.

Issues and developments

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Good practices

It is important to emphasize 'for whose benefit the information was sought'. Respondents could have looked for information on learning possibilities for children/family. The variable refers only to the respondent.

GUIDEINST: Guidance and counselling through institutions/organisations

Short description

Information or advice/help on learning possibilities received from institutions/organisations during the last 12 months.

Standard question

During the last 12 months, have you received any information or advice/help on learning possibilities from institutions/organisations (include all types of services and all modes of service received: face to face, internet, mail, phone, fax, posters, leaflet, etc...)?

Coding

- Transmission codes

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
GUIDEINST	-1	No answer
GUIDEINST_1	Each variable is coded 1 if selected, 2 if not selected, -1 if there is no answer	Yes, I received free of charge information or advice/help on learning opportunities from institutions/organisations
GUIDEINST_2		Yes, I paid for information or advice/help on learning opportunities from institutions/organisations
GUIDEINST_3		No, I did not receive any information or advice/help on learning opportunities from institutions/organisations

- Classification used Not applicable

Definition

- Filter None
- Reference period Last 12 months
- Concept

The concept of guidance and counselling is operationalised through the expression “receiving information or advice/help on learning possibilities” taken and adapted from a similar question on guidance and counselling from PES (question E13 of a ILO questionnaire prototype (http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/instructionalmaterial/wcms_140858.pdf)).

We mainly look at free information or advice/help and focus on information or advice/help provided by institutions and organisations. Information or advice/help provided by family/friends/neighbours/co-workers (informally) are excluded from the data collection.
- Technical issues -

Rationale

Guidance and counselling have been acknowledged in several EU policy reference documents as topical for the lifelong learning strategy and considered as a very important policy option for more and better lifelong learning.

Guidance and counselling embrace a set of activities that enables citizens at any age and at any point in their lives to identify their capacities, competences and interests, to make educational, training and occupational decisions and to manage their individual life paths in learning, work and other settings in which those capacities and competences are learned and/or used. Guidance covers a range of individual and collective activities relating to information-giving, counselling, competence assessment, support and the teaching of decision-making and career management skills.

This transversal role of guidance has been identified as contributing to achieving EU policy targets and objectives, with particular regard to vocational education and training, namely by:

- Informing, motivating and advising young and adults about further, possible and suitable learning options, thus contributing to: ease access to education and training, increase participation levels, increase effectiveness and relevance of education and training, increase qualification levels ; improve skills match on the labour market and stimulate professional and organisational developments of individuals and enterprises;
- Informing, motivating and advising young people about labour market relevant education and training, increased work-based learning and apprenticeships, flexible learning pathways, content and methods that acknowledge young people's lifestyles and interests, while maintaining high-level quality standards, contributing to the reduction of early drop-outs and to increase access and completion of tertiary education;
- Allowing for a clarification of personal skills, skills needs, interests and preferences that enables autonomous up-skilling choices, beyond traditional cultural and gender roles, directly contributing to the rise in the qualification of women and at-risk groups.

Issues and developments

In the context of the AES, we propose the following theoretical definition of Information, Guidance and Counselling for learning: a range of services (such as the provision of information, assessment, career management skills, orientation and advice) to assist learners and/or potential learners to make choices relating to education and training possibilities, all characterised by the following features:

- Provision of services often relies on some information/knowledge of the user' specific situation (for instance in terms of needs, preferences, inclinations, etc.)
- Provision of services can take place in various places and forms as well as through different media (including on the internet through on line automatic application as long as they provide for interaction)
- It can be free or charged, but we propose to mainly look at free services
- It can be provided by institutions, organisations, family, friends, media, etc. Information or advice/help provided by family/friends/neighbours/co-workers (informally) are excluded from the data collection (see *Concept* in the *Definition* section above).

This is largely based on the definition of Guidance and Counselling for lifelong learning taken from Decision No 1720/2006/EC of the European Parliament and of the Council of 15 November 2006 establishing an action programme in the field of lifelong learning. In there, guidance and counselling is defined as a range of activities such as information, assessment, orientation and advice to assist learners, trainers and other staff to make choices relating to education and training programmes or employment opportunities.

The concept becomes more complex than the pure concept of access to information (i.e. information searched and found) currently adopted in the AES of course, but when it comes to analysing the results the Commission proposes to look at:

- Receipt of guidance and counselling services
- The provider of guidance and counselling
- The type of guidance and counselling received
- The mode of provision

We propose not to look at satisfaction with (and self-assessed usefulness of) guidance and counselling services. Furthermore, we propose not to ask direct questions on how guidance and counselling influenced individuals' participation in LLL.

However, we acknowledge that even though there will be some conceptual and methodological limitations, proxy information could be statistically derived at the analytical stage by crossing info on guidance and counselling with participation in (and outcomes of) learning.

Indicators to be derived:

- Individuals benefiting from guidance and counselling services
- Provider of guidance and counselling
- Types of guidance and counselling services provided
- Modes of delivering guidance and counselling
- Various breakdowns and cross-tabulations including joint analysis of guidance, participation in and outcomes of learning

Good practices

This variable can be collected through two questions as an alternative. Indeed the interviewer can ask a first question whether the respondent received any advice/help and then ask another question whether the information received was free of charge or not.

See the suggested questions in the questionnaire.

GUIDESOURCE: Source of guidance (free of charge)

Short description

Source of the free of charge information or advice/help on learning possibilities received during the last 12 months

Standard question

Did you receive this free of charge information or advice/help on learning possibilities from any of the following institutions/organisations? (mark all that apply)

Coding

- Transmission codes

There should be **6 variables transmitted on the whole**: GUIDESOURCE, GUIDESOURCE_1, GUIDESOURCE_2, GUIDESOURCE_3, GUIDESOURCE_4 and GUIDESOURCE_5

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
GUIDESOURCE	-1	No answer
	-2	Not applicable (GUIDEINST_1 ≠ 1)
GUIDESOURCE_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (GUIDEINST_1≠1), -1 if there is no answer	From education or training institutions (school, college, university, VET centre, institution for adult learning, validation centre)
GUIDESOURCE_2		From employment services
GUIDESOURCE_3		From employer or employer organisations
GUIDESOURCE_4		From trade unions or work council
GUIDESOURCE_5		From other institutions/organisations providing free information or advice/help on learning opportunities (other than mentioned before)

- Classification used Not applicable

Definition

- Filter Respondents who received free of charge information or advice/help on learning possibilities (GUIDEINST_1 = 1)
- Reference period Last 12 months
- Concept See GUIDEINST variable
- Technical issues -

Rationale

-

Issues and developments

-

Good practices

-

GUIDETYPE: Type of guidance received (free of charge)

Short description

Type of the free of charge information or advice/help on learning possibilities received during the last 12 months

Standard question

Which type of free information or advice/help concerning learning possibilities have you received?
(mark all that apply)

Coding

- Transmission codes

There should be **5 variables transmitted on the whole**: GUIDETYPE, GUIDETYPE_1, GUIDETYPE_2, GUIDETYPE_3 and GUIDETYPE_4

Variable name	Codes	Labels
GUIDETYPE	-1	No answer
	-2	Not applicable (GUIDEINST_1 ≠ 1)
GUIDETYPE_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (GUIDEINST_1≠1), -1 if there is no answer	Information or advice/help on learning possibilities
GUIDETYPE_2		Assessment of skills and competences through tests, skills audits or interviews
GUIDETYPE_3		Information or advice/help on procedure for validation/recognition of skills, competences or prior learning
GUIDETYPE_4		Other type of information or advice/help

- Classification used Not applicable

Definition

- Filter Respondents who received free of charge information or advice/help on learning possibilities (GUIDEINST_1=1)
- Reference period Last 12 months
- Concept See GUIDEINST variable
- Technical issues -

Rationale

-

Issues and developments

-

Good practices

-

GUIDEMODE: Mode of delivery of guidance (free of charge)

Short description

Mode of delivery of the free of charge information or advice/help on learning possibilities received during the last 12 months

Standard question

In which way did you receive this free information or advice/help on learning possibilities? (*mark all that apply*)

Coding

- Transmission codes

There should be **5 variables transmitted on the whole**: GUIDEMODE, GUIDEMODE_1, GUIDEMODE_2, GUIDEMODE_3 and GUIDEMODE_4

Variable name	Codes	Labels
GUIDEMODE	0	None of the items below
	-1	No answer
	-2	Not applicable (GUIDEINST_1 ≠ 1)
GUIDEMODE_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (GUIDEINST_1≠1), -1 if there is no answer	Face-to-face interaction
GUIDEMODE_2		Interaction with a person through internet, phone, e-mail or any other media
GUIDEMODE_3		Interaction with a computer based application for information or advice/help (including online self-assessment tools)
GUIDEMODE_4		No interaction, only information through dedicated material (books, posters, websites, leaflet, TV programme, etc.)

- Classification used Not applicable

Definition

- Filter Respondents who received free of charge information or advice/help on learning possibilities (GUIDEINST_1 = 1)
- Reference period Last 12 months
- Concept See GUIDEINST variable
- Technical issues Face-to-face interaction intends that the person providing information is physically present (as opposed to an interaction through the internet).

Face-to-face can include situations in which the person provides advice/help to a whole group of people/students.

Rationale

-

Issues and developments

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Good practices

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FED: Participation in formal education and training

Short description

Participation in formal education and training during the last 12 months

Standard question

During the last 12 months, that is since <<month, year>> have you been a student or apprentice in formal education or training?

Coding

- Transmission codes

Codes	Labels
1	Yes
2	No

- Classification used Not applicable

Definition

- Filter None
- Reference period Last 12 months
- Concept Formal education or training.

Formal education is defined as “*Education that is institutionalised, intentional and planned through public organisations and recognised private bodies and – in their totality – constitute the formal education system of a country. Formal education programmes are thus recognised as such by the relevant national education authorities or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. Formal education consists mostly in initial education. Vocational education, special needs education and some parts of adult education are often recognised as being part of the formal education system.*” (ISCED 2011 glossary, page 80).

See *Issues and developments* for a definition of apprenticeship

- Technical issues The question(s) for this variable should be phrased by countries in a way that the concept of education designed to lead to achievement included in the National Framework of Qualifications is described as fully as possible. The phrasing can be for example:
During the last 12 months, that is since <<month, year>>, have you been studying towards a qualification?
Another possibility would be to list institutions providing formal education or list formal education and training programmes.
This includes completed and ongoing learning activities.
As it is considered a key variable on participation in lifelong learning, the 'No answer' category is not recommended. Moreover, as it is a key variable, appropriate time should be dedicated by the interviewer to this question.

Rationale

Learning activities cover many fields. According to the broad and commonly used definition in the European Union, lifelong learning encompasses the entire spectrum of formal, non-formal and informal learning.

Issues and developments

A learning activity is considered to be formal when upon its completion it leads to a learning achievement (qualification or award) that can be positioned to the National Framework of Qualification (NFQ).

It should be noted that the concept of NFQ should not be confused with the concept of “Framework of national qualifications”. The latter includes only the qualifications awarded by national education and training bodies while the NFQ covers also the qualifications delivered by awarding bodies operating in other countries.

Within the NFQ concept, several other criteria are involved for distinguishing formal from non-formal education and training.

- The “hierarchy-level” criterion: This is based on the ISCED definition according to which a formal learning activity can be seen as a complex “ladder” of education that requires the successful completion of one level-grade before proceeding to the next one.
- Admission requirements: a formal learning activity is subject to admission requirements which have to be fulfilled to have access to training. These usually relate to age and prior education attainment while such requirements may not exist for admission to a non-formal education and training programme.
- Registration requirements: a formal education is typically subject to registration, i.e. the requirement or set of requirements that need to be filled to record formally the enrolment to learning. On the other hand, there is no need for such requirement in non-formal education.

Apprenticeship shall be defined in the following way (see *Terminology of European education and training policy* released by CEDEFOP in 2008): '*systematic, long-term training alternating periods at the workplace and in an educational institution or training centre. The apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the trainee with training leading to a specific occupation.*'

Good practices

- Answer cards can be used on which categories of all relevant formal education programmes are listed. It is important that the programme has a theoretical duration of one semester/6 months. Information for the respondent on theoretical duration is only required if the duration of the programme is less than one semester or 6 months.
- This programme category approach could be developed in a way which would enable to collect information on level and orientation of education. For instance the approach with show cards could help identify specific programme categories or even specific programmes, in a way that makes possible to derive information about their level and orientation.
- Official programme lists can be used (e.g. UOE mappings, National Framework Qualifications) provided that these lists are up-to-date and comprehensive (no programme left aside).
- This could also be used (i.e. adapted) in case the second type of standard question (have you been studying towards a qualification) is used.
- In countries with a modular education system and in cases when it is difficult to assess whether a module is 'formal' or not, a question on the purpose of the module can be added: if intended to be used in a formal programme in the immediate future, it can be considered as formal itself.

- Qualification (National Framework Qualification)

When a non-formal learning programme leads to a qualification (in order to receive a formal qualification in the National Framework Qualification), the following rules should be followed:

- if the program directly leads to a NFQ qualification and the final examination is a part of it, it should be considered as formal;

- if the programme is designed to provide help for another formal programme, for instance to prepare for the final exam to obtain the formal NFQ qualification, and the final exam is not included in the programme but has to be taken separately, it should be considered as non-formal.

- Pre-call or pre-letter and list of learning activities

A good practice already implemented in some countries during the 2011 AES data collection consists in anticipating the interview by either calling the respondents or sending them a letter to explain the aim of the survey and already present the types of learning the respondent will have to remember about.

In case a letter is sent, a form to be filled in by the respondent **prior to the interview** can be included in the letter where they can list all the learning activities (either formal or non-formal) they participated in during the last 12 months, separately for each four types.

The form can be sent along with a letter presenting the survey to the respondent for instance.

By keeping this list close at hand during the interview, it will ease the answering process as the respondents will both have taken some time to already think about their participation and have a list to refer to when it comes to the key questions of the survey.

FEDNUM: Number of formal education or training activities

Short description

This variable refers to the number of formal education and training activities in which the respondent participated during the last 12 months

Standard question

In how many formal education or training activities did you participate in during the last 12 months?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
0	None (FED = 2)
1-99	Number of activities

- Classification used Not applicable

Definition

- Filter All respondents who participated in formal education or training during the last 12 months (FED = 1)
- Reference period Last 12 months
- Concept The number of formal education or training activities participated in during the last 12 months
- Technical issues -

Rationale

-

Issues and developments

-

Good practices

- Data collection through interviews.
- When it comes to asking for further details for the most recent formal education or training learning activity, the selected activity can be named and then referred to by its name in the questionnaire (see suggested questionnaire).

FEDSTARTYEAR: Starting year of the most recent formal education activity

Short description

This variable refers to the year when the most recent formal education or training activity started

Standard question

What year did the most recent formal education or training activity start?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
4 digits	The four digits of the year when the most recent formal education or training activity started
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months ($FEDNUM \geq 1$)
- Reference period Last 12 months (see concept)
- Concept Year when the most recent formal education or training activity started.
- Technical issues In case the respondent does not know the exact date an estimation should be provided.

Rationale

This variable may be used for analysis of the characteristics of the formal education and training. In particular, and together with the variable on the starting month (FEDSTARTMONTH) and the one on the completion of the learning activity (FEDCOMP), it provides an indication about the whole duration of the learning programme it refers to thus giving complementary information to the number of hours of instruction (NFENBHOURS).

Issues and developments

-

Good practices

- Data collection through interviews.
- The question should be placed at the beginning of the section on formal education and training

FEDSTARTMONTH: Starting month of the most recent formal education activity

Short description

This variable refers to the month when the most recent formal education or training activity started

Standard question

What month did the most recent formal education or training activity start?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM ≥ 1)
- Reference period Last 12 months (see concept)
- Concept Month when the most recent formal education or training activity started.
- Technical issues In case the respondent does not know the exact date an estimation should be provided.

Rationale

See FEDSTARTYEAR

Issues and developments

-

Good practices

- Data collection through interviews.
- The question should be placed at the beginning of the section on formal education and training

FEDLEVEL: Level of the most recent formal education activity

Short description

This variable indicates the level of the most recent formal education or training activity in which the respondent participated

Standard question

What was the level of the most recent formal education or training activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
100	ISCED 1
200	ISCED 2 (including ISCED 3 programmes of a duration which is less than 2 years)
302	ISCED 3 programme duration of 2 years and more, sequential (i.e. access to next ISCED 3 programme only)
303	ISCED 3 programme duration of 2 years and more, terminal or access to ISCED 4 only
304	ISCED 3 with access to ISCED 5, 6 or 7
300	ISCED 3 programme duration of 2 years and more, without possible distinction of access to other ISCED levels
400	ISCED 4
500	ISCED 5
600	ISCED 6
700	ISCED 7
800	ISCED 8
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used International Standard Classification of Education ([ISCED](#)) 2011

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1)
- Reference period Last 12 months
- Concept The level of the most recent formal education or training activity
- Technical issues Similar to the technical issues mentioned in variable 'HATLEVEL'

Rationale

-

Issues and developments

-

Good practices

Data bound to the information collected through variables FED and FEDVOC, according to a programme/programme category approach (or qualifications for countries using a question for FED related to qualifications).

FEDCOMP: completion of the most recent formal education activity

Short description

This variable aims at knowing whether the most recent formal education or training activity has been completed, has been abandoned or is still on-going

Standard question

Have you completed the most recent formal education or training activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	No, I dropped out before the expected end
2	No, it is still on-going
3	Yes, I completed it
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1)
- Reference period Last 12 months
- Concept Completion of the most recent formal education or training activity
- Technical issues -

Rationale

This variable may be used for analysis of the characteristics of the formal education and training. In particular, and together with the variable on the starting month (FEDSTARTMONTH) and the starting year (FEDSTARTYEAR), it provides an indication about the whole duration of the learning programme it refers to, thus giving complementary information to the number of hours of instruction (FEDNBHOURS).

The variable can also be used to investigate patterns of recent drop out from formal education and training.

Issues and developments

-

Good practices

Data collection through interviews.

FEDFIELD: Field of the most recent formal education activity

Short description

This variable indicates the field of the most recent formal education or training activity in which the respondent participated

Standard question

What was the field of the most recent formal education or training activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
00	Generic programmes and qualifications
01	Education
02	Arts and humanities
03	Social sciences, journalism and information
04	Business, administration and law
05	Natural sciences, mathematics and statistics
06	Information and Communication Technologies (ICTs)
07	Engineering, manufacturing and construction
08	Agriculture, forestries, fisheries and veterinary
09	Health and welfare
10	Services
99	Unknown
-1	No answer
-2	Not applicable (FEDNUM = 0 or FEDLEVEL ≠ 300 to 800)

- Classification used Classification of fields of education and training, at level 1 of the classification. Subdivisions of the classification of fields of education and training can be used on an optional basis.

The version used for 2016 AES is the 2013 ISCED Fields of Education Classification. Full classification available on the following link: <http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf>

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM ≥ 1) with at least an ISCED3 level of education (FEDLEVEL = 300 to 800)
- Reference period Last 12 months
- Concept The field of the most recent formal education activity
Field of education or training is a classification of subject matters taught in an educational programme. The classification can be used to classify the main contents of educational programmes which contain a number of subjects. Then, the time spent on each subject is the main criteria for classification of the whole programme.

- Technical issues -

Rationale

-

Issues and developments

-

Good practices

Field of training has to be transmitted according to ISCED 2013 – Fields of Education Classification. At the time of interview (first coding), the interviewer can refer to a national list of fields of training. The information is in some countries captured through asking about the subject/topic or content of each course/training/program. In other countries the respondent can choose from a specified list of fields of training for each course/training/program. Then when the data is managed at national institutes, post-coding should be done to code into the appropriate ISCED classification expected.

FEDVOC: Orientation of the most recent formal education activity

Short description

This variable indicates the orientation of the most recent formal education or training in which the respondent participated

Standard question

What was the orientation of the most recent education or training?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	General education
2	Vocational education
-1	No answer
-2	Not applicable (FEDLEVEL ≠ 300 to 400)

- Classification used Not applicable

Definition

- Filter All respondents with an ISCED3 to ISCED4 level in the most recent formal education or training (FEDLEVEL = 300 to 400)
- Reference period Last 12 months
- Concept The orientation of the most recent formal education or training activity
For the definition of ‘general’ and ‘vocational’ education please see the concept of the variable ‘HATVOC’
- Technical issues -

Rationale

The variable is needed to provide breakdowns and specification of indicators by orientation of education and for more specifically look at the contribution of formal VET to adult learning.

Issues and developments

During the preparation of AES 2011 Eurostat recommended that the variable was restricted to ISCED 3 and 4. Moreover, classification was then aligned with the LFS.

Good practices

- Data bound to the information collected through variables FED and FEDLEVEL, according to a programme/programme category approach (or qualifications for countries using a question for FED related to qualifications).
- The collection of information on educational attainment through the diploma approach (as recommended in the LFS) is a good practice. Such approach may provide useful information on level and orientation of education as well, on the basis for instance of available lists of formal qualifications.
 - In case there is a unique and direct question for collecting the orientation (i.e. where the recommended diploma approach is not adopted) another good (second best) practice is that

countries add the following statement to the suggested question: 'Vocational means it is designed for acquiring knowledge skills and competencies closely linked to particular occupations or trades'.

- In some countries, there are some programmes/qualifications with a national name/label making reference to technical education and which by ISCED standard are typically vocational. Both in LFS and AES they should be classified as vocational as long as they meet the definition of vocational education.

FEDDIST: Distance learning for the most recent formal education or training activity

Short description

This variable indicates whether the most recent formal education or training activity was mainly (more than 50% of instruction time) organised as distance learning

Standard question

Was the most recent formal education or training activity organised mainly as distance learning?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1)
- Reference period Last 12 months
- Concept

Distance learning mainly used in the most recent formal education or training activity

Distance Learning: learning that takes place via postal correspondence or electronic media, linking instructors or students who are not together in a classroom. For this there is interaction between the teacher and the student, although it doesn't happen immediately but with a delay. *Comments: Distance learning is opposed to other learning patterns such as face-to-face learning, but both are taught learning settings* (based on: European Foundation for the Improvement of Living and Working Conditions)

Mainly: respondents should consider that the learning was **mainly** organised as distance learning when this particular mode of learning was used at least 50 % of the instruction time.
- Technical issues The question concerns the main method of learning. The fact that during the distance education study there were some meetings organised in order to consult the coach or for some lectures should not change the classification of the activity as distance education if the learning was mainly (at least 50 %) organised as distance learning.

Rationale

The initiative on Opening up Education (*Opening Up Education: Innovative teaching and learning for all through new technologies and open educational resources (COM(2013) 654 final)*) aims at better integrating ICT in education and training systems, in particular exploiting the potential of online learning resources, especially freely available Open Educational Resources (OER).

In spite of an explosion of OER, like the Massive Open Online Courses (MOOCs), in recent years, there are no reliable data about their real demand. It is relatively easy to obtain data about the number of users of different platforms, but not to estimate the real use of digital technologies and Internet for learning, the time compared with other activities, and what is the educational context of their use (e.g. for formal or non-formal learning, for different fields of learning), etc...

To make the best use of AES and cover important gaps in existing evidence a major change was discussed by the 2016 AES Task Force consisting in a revision of the whole ICT part, to better cover the phenomena of the use of ICT tools for learning rather than ICT usage in general.

On the other hand, questions on ICT usage in general are not often cross-tabulated with education variables in the AES, and it therefore seems more suitable and sufficient to use the Community Survey on the usage of ICT in households and by individuals to collect data on ICT usage in general.

It was therefore proposed to remove the ICT variables from AES (ICTCOMPUTER, ICTINTERNET) and to introduce new variables on the method of learning replacing the former variables on the method used for the learning (FEDMETHOD and NFEMETHODx) focusing more on ICT-related concepts.

The variable FEDMETHOD aimed to differentiate between traditional teaching and distance learning. Furthermore they aim to distinguish between distance learning using online or offline computer and distance learning using traditional teaching material.

The outcome of the discussion during one of the Task Force meetings (December 2013) was that it is still important to be able to distinguish distance learning from non-distance learning, and to identify participation in distance learning through online courses. However, it would be better not to refer to traditional teaching or traditional learning material anymore.

The data collected on the method of learning is more relevant to policy needs if it also captures the use of online learning resources. For this new variable (FEDOERA), a frequency scale could be used instead of a binary question.

Issues and developments

-

Good practices

Data collection through interviews.

FEDDISTOL: Distance learning organised as an online course

Short description

This variable indicates whether the most recent formal education or training activity which was mainly (more than 50% of the instruction time) organised as distance learning was organised as an online course

Standard question

Was this distance learning for the most recent formal education or training activity mainly organised as an online course?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (FEDDIST \neq 1)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months ($FEDNUM \geq 1$) which was mainly organised as distance learning ($FEDDIST = 1$)
- Reference period Last 12 months
- Concept Doing an online course reflects learning courses distant from the location of education and training organisations or employer where courses can be attended in person (often but not necessarily done at home). Interaction with teachers, trainers and/or learning material is done via the Internet. The use of e-learning software programmes can play a role. Online course is a form of instruction that involves a prescribed number of lessons or learning modules. The learning content of the course is focused around a specific main topic which is then structured in to a variety of multimedia elements such as presentations, interactive content, graphics, audio, and video to form the complete course.
- Technical issues -

Rationale

See FEDDIST

Issues and developments

-

Good practices

Data collection through interviews.

FEDOERA: Use of online educational resources for the most recent formal education or training activity

Short description

This variable refers to the use of online resources for the most recent formal education or training activity

Standard question

Have you used online educational resources in the most recent formal education or training activity (for instance audio-visual materials, online learning software, electronic textbooks, etc.)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Very frequently
2	Frequently
3	Sometimes
4	Never
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1) and not only those who learnt through distance learning
- Reference period Last 12 months
- Concept Use of online resources (see issues and development below)
- Technical issues -

Rationale

See FEDDIST

Issues and developments

Educational Resources (OERs): any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation.

For further details, see the following link: <http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/open-educational-resources/what-are-open-educational-resources-oers/>

Good practices

Data collection through interviews.

FEDOERB: Interaction with other people through the internet

Short description

This variable refers to the interaction with other people (e.g. teachers, learners) through educational websites/portals for the most recent formal education or training activity

Standard question

Did you interact with other people (e.g. teachers, learners) through educational websites/portals for the most recent formal education or training activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1) and not only those who learnt through distance learning
- Reference period Last 12 months
- Concept Use of online resources
- Technical issues -

Rationale

See FEDDIST

Issues and developments

-

Good practices

Data collection through interviews.

FEDREASON: Reasons for participating in the most recent formal education activity

Short description

This variable provides information on the reasons for which the respondent participated in the most recent formal education activity

Standard question

What were the reasons for participating in the most recent formal education or training activity? (*mark all that apply*)

Coding

- Transmission codes

There should be **11 variables transmitted on the whole**: FEDREASON, FEDREASON_01a, FEDREASON_01b, FEDREASON_02, FEDREASON_03, FEDREASON_04, FEDREASON_05, FEDREASON_06, FEDREASON_07, FEDREASON_08, FEDREASON_09

Variable name	Codes	Labels
FEDREASON	0	None of the items below
	-1	No answer
	-2	Not applicable (FEDNUM = 0)
FEDREASON_01a	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (FEDNUM=0), -1 if there is no answer	To do my job better
FEDREASON_01b		To improve career prospects
FEDREASON_02		To be less likely to lose my job
FEDREASON_03		To increase my possibilities of getting a job or changing a job/profession
FEDREASON_04		To start my own business
FEDREASON_05		I was obliged to participate
FEDREASON_06		To get knowledge/skills useful in my everyday life
FEDREASON_07		To increase my knowledge/skills on a subject that interests me
FEDREASON_08		Obtain certificate
FEDREASON_09		To meet new people / For fun

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM ≥ 1)
- Reference period Last 12 months
- Concept Reasons for participating in formal education or training activity
- Technical issues Unlike the 2011 AES, the regulation does not require the countries to provide the number of responses provided in the list. If none of the reasons are selected, this corresponds to the code 0 for variable FEDREASON.

Rationale

This question is to understand the attitude and motivation towards learning.

- Reasons/motivations: Purpose of learning may be job-related or non-job-related (e.g. self-development, new job, new position at work, family reasons, integration in social life)
- Purposes/Expected outcomes (e.g. new qualification, certification, upgrading of skills)
- Benefits of these studies (e.g. higher wages, better working conditions, maintaining job, access to new jobs, self-esteem)

Issues and developments

-

Good practices

In the majority of the national surveys the motives/purposes of learning are divided into more categories for both job-related and personal purposes. Job-related motives can be to increase income, avoid losing job, get a promotion/career, cope with evolving tasks, change job, start own business etc. Personal motives can be hobbies/leisure, personal development, social competence, meet other people, etc.

FEDWORKTIME: Most recent formal education or training activity during paid working hours

Short description

The variable indicates whether the most recent formal education or training activity in which the respondent participated took place during paid working hours, including paid leave or recuperation

Standard question

Did the most recent formal education or training activity take place during paid working hours (including paid leave or recuperation)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Only during paid working hours
2	Mostly during paid working hours
3	Mostly outside paid working hours
4	Only outside paid working hours
5	Not working at that time
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM ≥ 1)
- Reference period Last 12 months
- Concept

Most recent formal education or training that took place during paid working hours

This question refers to the degree that the activity takes place during paid working hours meaning that the working hours are used to attend the activity instead of working. It also includes the case where a number of working hours are being replaced by the learning activity even if the activity itself takes place outside normal working time of the respondent.
- Technical issues

In case when 50% of the activity took place during paid working hours and 50% outside, this activity should be classified as “mostly during paid working hours”. If the learning activity takes place outside working time and the respondent has received payment for the hours or additional leisure hours, the activity should be coded as “only during paid working hours”.

The answer should only reflect the participation in the course itself and not homework.

 - Self-employed should be treated as employed
 - Contributing family workers (those workers who hold a 'self-employment' job in a market-oriented establishment operated by a related person living in the same household), who cannot be regarded as partners, voluntary social workers and others working without being paid but

attending a course within that area should be coded as “only outside paid hours”, as there are no paid working hours.

- If in the time of attending formal education or training the respondent does not have a job during the full period of the course (during a reference period), there will be two periods of the course: the period where the person is in a job and the period where the person is not in job. The answer and coding should reflect the situation in the longest period of the course (again within the reference period).

Rationale

Learning during paid working hours roughly corresponds to learning organised and sponsored by the employers. Question on the time invested during working time or outside of working time is primarily to determine whether the learning activity was totally, partially or not at all supported by an employer.

Issues and developments

-

Good practices

- Data collection through interviews.
- Variable FEDPAIDBY can be asked before FEDWORKTIME to help distinguish between activities taking place in 'free time' and those within working hours paid by the employer.

FEDNBHOURS: Volume of instruction of formal education or training activity – Number of hours

Short description

This variable refers to the total number of instruction hours the respondent has attended for the most recent formal education or training activity.

Standard question

How many instruction hours did you receive for the most recent formal education or training activity during the last 12 months?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1-9999	Total number of instruction hours
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM ≥ 1)
- Reference period Last 12 months
- Concept

Number of instruction hours

We are interested in the volume of the programme the respondent participated in during the last 12 months. It may be difficult to measure this time (some of the programmes have compulsory number of hours a person should participate in, but calculated for all the programme duration or for the duration in the school year and not for the last 12 months). So we should rather ask about number of hours the respondent really attended during the last 12 months.
- Technical issues The respondent may find it difficult to provide a precise number of hours. He/She may also forget about his/her absence caused by illness, professional duties, etc. An alternative solution to compute the number of hours is proposed in the item 'Good Practices' below.

Rationale

-

Issues and developments

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Good practices

Time spent on paid working hours is in most national surveys captured through asking if the course/program took place during working hours or on free time.

- Alternatively to the variable FEDNBHOURS, the interviewer may ask both FEDNBWEEKS (number of weeks) and FEDDURPERWEEK (average number of instruction hours per week) to compile the FEDNBHOURS variable. Proposed ways of asking questions for this variable:
 - *How many weeks during the last 12 months you participated in the “include the name of the program/course”? (FEDNBWEEKS)*
 - *What was the number of instruction hours per week on average? (FEDDURPERWEEK)*

Only the number of hours (FEDNBHOURS) should be transmitted to Eurostat.

- In case of difficulties to properly answer and in order to avoid non-response, the interviewer could ultimately ask for the best estimate that the respondent can provide.

FEDPAID: Payment for the most recent formal education or training activity

Short description

This variable refers to the payment for tuition, registration, exam fees, expenses for books or technical study means for the most recent formal education or training activity.

Standard question

Which one of the following cases best describes the payment for tuition, registration, exam fees, and expenses for books or technical study means, regarding your studies for the most recent formal education or training activity?

Coding

- Transmission codes

Codes	Labels
1	Fully paid by yourself
2	Partly paid by yourself and partly by somebody else
3	Fully paid by somebody else
4	Free activity
5	You do not know
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months ($FEDNUM \geq 1$)
- Reference period Last 12 months but payments beyond this period should also be included if they refer to the learning activity (fees might have to be paid prior to the start of the learning activity)
- Concept Respondent paying for the most recent formal education or training activity
In categories 2 and 3, '*somebody else*' may refer to a relative, a friend but also to the employer for instance. If somebody else is involved in the payment (categories 2 and 3), then the next question FEDPAIDBY aims at knowing who was in charge of contributing to the payment.
- Technical issues In the 2011 AES, this variable was only included in the AES standard questionnaire. For sake of clarity, the 2016 AES Task Force recommended to introduce it into the list of variables of the 2016 AES wave and to remove the variable FEDPAIDFULL instead. In the 2011 AES, a category for 'free activities' was missing as reported by many national coordinators of the AES. Therefore an extra 'free activity' category has been added here.

Rationale

See rationale for FEDPAIDBY hereafter.

Issues and developments

-

Good practices

Data collection through interviews.

FEDPAIDBY: Partial or full payment for formal education or training activity

Short description

This variable indicates the person/service that provided partial or full payment for the tuition, registration, exam fees, expenses for books or technical study means for the most recent formal education or training activity in which the respondent participated during the last 12 months.

Standard question

Which one of the following entities paid in-part or in-full for tuition, registration, exam fees, and expenses for books or technical study means, regarding your studies for the most recent formal education or training activity? (*mark all that apply*)

Coding

- Transmission codes

There should be **5 variables transmitted on the whole**: FEDPAIDBY, FEDPAIDBY_1, FEDPAIDBY_2, FEDPAIDBY_3, FEDPAIDBY_4

Variable name	Codes	Labels
FEDPAIDBY	0	None of the items below
	-1	No answer
	-2	Not applicable (FEDNUM = 0 or (FEDPAID ≠ 2 and 3))
FEDPAIDBY_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (FEDNUM=0 or (FEDPAID≠2 and FEDPAID≠3)), -1 if there is no answer	Employer or prospective employer
FEDPAIDBY_2		Public Employment Services
FEDPAIDBY_3		Other public institutions
FEDPAIDBY_4		A household member or a relative

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months that was fully/partly paid by somebody else (FEDNUM = 0 or (FEDPAID ≠ 2 and 3))
- Reference period Last 12 months but payments beyond this period should also be included if they refer to the learning activity (fees might have to be paid prior to the start of the learning activity)
- Concept Partial or full payment for the most recent formal education or training activity

This variable concerns the situation when the direct expenses, which were expected to be paid by the respondent, were fully or partly paid by some other party. In case the worker was employed by a member of his/her household and received financial support from the household but as an employee this should be treated as employer and not household support. In case the

respondent was self-employed when participating in education and training and financed the expenses from his/her company sources, that should be coded as employer's support (either full or part).

Technical study means are all the helpful materials respondent was buying for the study, so computer, software, CDs, DVDs, drawing boards (for courses on architecture), clay, etc.

- Technical issues The coding of this variable was changed compared to the 2011 AES in order to improve the data collection on payment. A new variable FEDPAID was introduced before FEDPAIDBY (like in the 2011 questionnaire). The information previously collected via FEDPAIDFULL is now obtained through FEDPAID, therefore FEDPAIDFULL is removed compared to the 2011 AES.

Rationale

The issue of investment in human capital and lifelong learning is very important for the future of learning society in Europe. Although solid information on the cost sharing between different actors (source of financial support) and the effect of these different arrangements on access to education and learning would be highly desirable, a household survey has some limitations as a data gathering instrument for these questions.

Issues and developments

-

Good practices

Data collection through interviews.

FEDUSEA: Current use of skills/knowledge from the most recent formal education or training activity

Short description

This variable assesses the **current** use of skills or knowledge acquired from the most recent formal education or training activity in which the respondent participated

Standard question

How much are you **currently** using the skills or knowledge that you acquired from the most recent formal education or training activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	A lot
2	A fair amount
3	Very little
4	Not at all
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1)
- Reference period Last 12 months
- Concept The **current** use (at the moment of the interview) of skills/knowledge acquired from the most recent formal education or training activity
- Technical issues -

Rationale

Information on the usefulness of skills and knowledge acquired from formal education or training activities may determine which activities offer the greatest benefit on the life and work of participants. It can, thus, provide motivations for participating in such activities.

Issues and developments

-

Good practices

Data collection through interviews.

FEDUSEB: Expected use of skills/knowledge from the most recent formal education or training activity

Short description

This variable assesses the **expected** use of skills or knowledge acquired from the most recent formal education or training activity in which the respondent participated

Standard question

How much are you **expecting** to use the skills or knowledge that you acquired from the most recent formal education or training activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	A lot
2	A fair amount
3	Very little
4	Not at all
-1	No answer
-2	Not applicable (FEDNUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM \geq 1)
- Reference period Last 12 months
- Concept The **expected** use (at any moment after the interview) of skills/knowledge acquired from the most recent formal education or training activity
- Technical issues -

Rationale

See FEDUSEA

Issues and developments

-

Good practices

Data collection through interviews.

FEDOUTCOME: Outcomes of the most recent formal education or training activity

Short description

This variable indicates the outcomes of the new skills/knowledge acquired through the most recent formal education or training activity in which the respondent participated

Standard question

Have the new skills/knowledge acquired through the most recent formal education or training activity helped you in any of the following ways? (*mark all that apply*)

Coding

- Transmission codes

There should be **8 variables transmitted on the whole**: FEDOUTCOME, FEDOUTCOME_1, FEDOUTCOME_2, FEDOUTCOME_3, FEDOUTCOME_4, FEDOUTCOME_5, FEDOUTCOME_6, FEDOUTCOME_7

Variable name	Codes	Labels
FEDOUTCOME	0	None of the items listed below
	-1	No answer
	-2	Not applicable (FEDNUM = 0)
FEDOUTCOME_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (FEDNUM=0), -1 if there is no answer	Getting a (new) job
FEDOUTCOME_3		Higher salary/wages
FEDOUTCOME_2		Promotion in the job
FEDOUTCOME_4		New tasks
FEDOUTCOME_5		Better performance in present job
FEDOUTCOME_6		Personal-related reasons (meet other people, refresh your skills on general subjects, etc.)
FEDOUTCOME_7		No outcome yet

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one formal education or training activity during the last 12 months (FEDNUM ≥ 1)
- Reference period Last 12 months
- Concept The outcomes of new skills/knowledge acquired through the most recent formal education or training activity
Outcomes, in general, refer to what is ultimately achieved by an activity, as distinct from its outputs which relate to more direct or immediate objectives.
- Technical issues The order of categories 2 and 3 are changed compared to the 2011 AES in order to enhance the logic of the questionnaire, **but the codes are kept as such compared to the 2011 AES**, this is the reason why FEDOUTCOME_3 comes before FEDOUTCOME_2 in the list.

Moreover, in order to avoid any confusion with the use and particularly the new variable on the expected use (FEDUSEB), it was recommended by the 2016 AES Task Force to remove the category "No outcome expected" from the list.

The term 'reasons' in the category FEDOUTCOME_6 still refers to an outcome (i.e. participating in the learning activity led to getting to know other people and/or refresh skills, etc...).

Rationale

This variable is very important for the survey as it provides information on the outcomes through formal education or training activities. Such information may be used in order to indicate the most beneficial activities that result in improving the working and living conditions of the individual who participates in such programmes.

Issues and developments

-

Good practices

Data collection through interviews.

NFE: Participation in non-formal education and training

Short description

This variable refers to the participation in any of the four types of non-formal education and training – i.e. with the intention to improve knowledge/skills in any area (including hobbies) either in leisure time or in working time – during the last 12 months

Standard question

During the last 12 months have you participated in any of the following activities - completed or ongoing - with the intention to improve knowledge or skills in any area (including hobbies) either in leisure time or in working time?

- a) Courses
- b) Workshops and Seminars
- c) Guided on-the-job training
- d) Private lessons?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No

- Classification used Not applicable

Definition

- Filter None
- Reference period Last 12 months
- Concept Participation in any of the following activities:
 - a) Courses (NFECOURSE)
 - b) Workshops and Seminars (NFEWORKSHOP)
 - c) Guided on the job training (NFEGUIDEDJT)
 - d) Private lessons (NFELESSON)
- Technical issues Taught learning activities which were planned in advance are targeted here.

If the person delivering lessons has as main activity delivering private lessons and has a professional teacher-to-student relationship in this context to the learner then it is non-formal education and training. If the provider/tutor is assisting the learner in the framework of a social relationship then that should be considered as informal learning.

Guided-on-the-job training is training which is **planned** in advance with a designated **teacher/instructor** (therefore different from informal learning from colleagues which is not considered as guided-on-the-job).

Private lessons can even be “formal education” in the case where the national educational system recognises home schooling, as the pupil would participate in institutionalised learning designed to lead to a formal qualification. In this case they should be reported in the module FED.

There is an implicit hierarchy of the categories “Formal”, “Non-formal” and “Informal”. “Formal” education and training comes first, then “non-formal” comes second and “informal” comes last. Learning activities carried out as part of another learning activity which is higher in this hierarchy can be considered as part of the higher activity: for example using self-study, additional tutoring, use of internet resources is considered as informal learning but when it is part of the preparation for homework for a formal education programme it can then be considered as part of the formal learning activity.

On the contrary when an activity considered higher in the hierarchy is organised in the framework of a longer activity of a lower level of the hierarchy then it should be considered as a separate activity.

As it is considered a key variable on participation in lifelong learning, the 'No answer' category is not recommended.

Moreover, as it is a key variable, appropriate time should be dedicated by the interviewer to this question.

Rationale

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Issues and developments

Some difficulties have been reported during the previous AES waves to separate guided-on-the-job training from other similar job-related learning activities. In this extent it is recommended that the interviewer reminds the respondent about key criteria of guided-on-the-job training and gives proper examples of what is guided-on-the-job training (see Annex 1).

Good practices

- Data collection through interviews.
- Qualification (National Framework Qualification)

When a non-formal learning programme leads to a qualification (in order to receive a formal qualification in the National Framework Qualification), the following rules should be followed:

- if the program directly leads to a NFQ qualification and the final examination is a part of it, it should be considered as formal;

- if the programme is designed to provide help for another formal programme, for instance to prepare for the final exam to obtain the formal NFQ qualification, and the final exam is not included in the programme but has to be taken separately, it should be considered as non-formal.

- Four questions for the four types of non-formal learning activities

In order to properly cover all four types of non-formal learning activities, a better practice than a generic question comprising the four types of activities at the same time can be to split the question in four independent questions properly assessing what each type of non-formal learning activity is along with examples.

Then after each question the number of corresponding non-formal learning activities in which the respondent participated can be asked and the total number (NFENUM) can then be derived as the sum of the four numbers (see suggested questionnaire).

- Pre-call or pre-letter and list of learning activities

A good practice already implemented in some countries during the 2011 AES data collection consists in anticipating the interview by either calling the respondents or sending them a letter to explain the

aim of the survey and already present the types of learning the respondent will have to remember about.

In case a letter is sent, a form to be filled in by the respondent **prior to the interview** can be included in the letter where they can list all the learning activities (either formal or non-formal) they participated in during the last 12 months, separately for each four types.

The form can be sent along with a letter presenting the survey to the respondent for instance.

By keeping this list close at hand during the interview, it will ease the answering process as the respondents will both have taken some time to already think about their participation and have a list to refer to when it comes to the key questions of the survey.

NFENUM: Number of non-formal learning activities

Short description

This variable indicates the number of non-formal learning activities in which the respondent participated during the last 12 months

Standard question

In how many such non-formal learning activities have you participated during the last 12 months?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1-99	Number of activities
0	None (NFECOURSE = NFEWORKSHOP = NFEGUIDEDJT = NFELESSON = 2)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one of the activities listed in NFE (NFECOURSE = 1 or NFEWORKSHOP = 1 or NFEGUIDEDJT = 1 or NFELESSON = 1)
- Reference period Last 12 months
- Concept Number of non-formal learning activities during the last 12 months
- Technical issues No technical issues linked to this variable

Rationale

-

Issues and developments

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Good practices

- Data collection through interviews.
- The total number NFENUM can then be derived as the sum of the four numbers given for each type of activity (see NFE variable above and suggested questionnaire).

NFEACTxx_TYPE: Type of the x non-formal learning activity

Short description

This variable indicates the type of the xx (xx = 01 to 07) non-formal learning activity in which the respondent participated during the last 12 months. The same information is then repeated in the variable NFERANDxx_TYPE if the learning activity is selected (randomly) for further description.

Standard question

What was the type of the non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Courses
2	Workshops and seminars
3	Guided-on-the-job training
4	Private lessons
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months (NFENUM ≥ 1)
- Reference period Last 12 months
- Concept The type of the first non-formal learning activity
- Technical issues The type of participation is to be collected for each activity in which the respondent participated during the last 12 months. This question shall be repeated at maximum 7 times in order to identify the type of all non-formal learning activities undertaken.

Rationale

The number of non-formal learning activities the type of which is to be reported is decreased from 10 to 7 compared to the 2011 AES. Indeed, as shown by the structure of the 2011 AES microdata there is no need to collect further information as people having more than 7 non-formal learning activities are very rare in the sample, all countries included. As a counterpart, more information will be collected on each of the 7 learning activities.

Issues and developments

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Good practices

Data collection through interviews.

NFEACTxx_PURP: Job-related non-formal learning activity

Short description

This variable assesses whether the non-formal learning activity reported in NFEACTxx_TYPE is job-related

Standard question

Was the non-formal learning activity mainly job-related?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Mainly job-related
2	Mainly personal/non-job-related reasons
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months ($NFENUM \geq 1$)
- Reference period Last 12 months
- Concept Job related non-formal learning activities during the last 12 months
The LFS explanatory notes provide the following definitions:
 - Job-related (professional): the respondent takes part in this activity in order to obtain knowledge and/or learn new skills for a current or a future job, increase earnings, improve job- and/or carrier opportunities in a current or another field and generally improve his/her opportunities for advancement and promotion.
 - Non job-related (personal/social): the respondent takes part in this activity in order to develop competencies required for personal, community, domestic, social or recreational purposes.
- Technical issues In the 2011 AES, the data collection on non-formal learning activities was such that we only knew whether there was at least one job-related non-formal learning activity among the non-formal learning activities the type of which had been reported (at maximum 10 in the 2011 AES). In the 2016 AES for the first time, the information is available for each non-formal learning activity the type of which is reported by the respondent (at most 7 in the 2016 AES).

The variable answer categories are labelled differently in the regulation. The 'Yes' and 'No' answers suggested here are equivalent and proposed for the sake of simplicity and consistency with the other two variables on the characteristics of the learning activity (i.e. NFEACTxx_WORKTIME, NFEACTxx_PAIDBY).

Guided-on-the-job training is by nature job-related so whenever NFEACTxx_TYPE is coded '3' then NFEACTxx_PURP should be coded '1'.

Rationale

The variable is meant to provide participation rates in education and training by purpose, with a more precise estimator than in the 2011 AES.

There is a particular interest in distinguishing and measuring participation in, and volume of, job-related non-formal learning activities. It was therefore recommended by the 2016 AES Task Force to collect the information for each non-formal learning activity reported by the respondent (at most 7).

Issues and developments

Some difficulties have been reported from the experience of the pilot AES to separate guided-on-the-job training from other similar job-related learning activities. In this extent it is recommended that the interviewer gives proper examples of what is guided-on-the-job training to the respondent (see NFE variable above).

Good practices

Data collection through interviews.

NFEACTxx_WORKTIME: Non-formal learning activity during paid working hours

Short description

This variable assesses whether the non-formal learning activity reported in NFEACTxx_TYPE took place during paid working hours (including paid leave and recuperation)

Standard question

Did the non-formal learning activity take place mostly or fully during paid working hours (including paid leave or recuperation)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No (including not working at that time)
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months ($NFENUM \geq 1$)
- Reference period Last 12 months
- Concept Non-formal learning activity taking place during paid working hours
- Technical issues In the 2011 AES, the data collection on non-formal learning activities was such that we only knew whether there was at least one non-formal learning activity which took place during paid working hours among the non-formal learning activities the type of which had been reported (at maximum 10 in the 2011 AES). In the 2016 AES for the first time, the information is available for each non-formal learning activity the type of which is reported by the respondent (at most 7 in the 2016 AES).

In case when at least 50% of instruction hours of the activity took place during paid working hours, this variable should be coded “Yes”.

The answer should only reflect the participation in the activity itself and not homework. Self-employed should be treated as employed.

Rationale

The variable is meant to provide participation rates in education and training supported by the employer in combination with the variable NFEACTxx_PAIDBY. This would also ensure the link with results from the Continuing Vocational Training Survey.

See also the rationale for the variable FEDWORKTIME.

Issues and developments

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Good practices

- Data collection through interviews.
- In case the respondent found it difficult to give a direct answer, then the question can be asked with answer categories, following the similar question FEDWORKTIME asked in the section on formal education, and the final coding can be derived as follows

<i>Labels</i>	<i>Derived code for NFEACTxx_WORKTIME</i>
Only during paid working hours	1
Mostly during paid working hours	1
Mostly outside paid working hours	2
Only outside paid working hours	2
Not working at that time	2
No answer	-1
Not applicable	-2

NFEACTxx_PAIDBY: Non-formal learning activity partially or fully paid by the employer

Short description

This variable assesses whether the employer or prospective employer paid fully or partially for the non-formal learning activity reported in NFEACTxx_TYPE. This only refers to direct costs.

Standard question

Did your employer pay partially or fully for the non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No (including not working at that time)
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months (NFENUM ≥ 1)
- Reference period Last 12 months
- Concept Non-formal learning activity partially or fully paid (fees, etc.) by the employer
- Technical issues In the 2011 AES, the data collection on non-formal learning activities was such that we only knew whether there was at least one non-formal learning activity which the employer or prospective employer paid fully or partially among the non-formal learning activities the type of which had been reported (at maximum 10 in the 2011 AES). In the 2016 AES for the first time, the information is available for each non-formal learning activity the type of which is reported by the respondent (at most 7 in the 2016 AES).

In case a respondent takes a business on their own account – therefore considered a self-employed – and works for one company only, if they participated in a course organised and partially or fully paid by this latter company then variable NFEPaidBY1_1 'Paid by the employer or prospective employer' should be selected.

Rationale

The variable is meant to provide participation rates in education and training supported by the employer in combination with the variable NFEACTxx_WORKTIME. This would also ensure the link with results from the Continuing Vocational Training Survey.

See also the rationale for the variable FEDPAIDBY.

Issues and developments

-

Good practices

Data collection through interviews.

NFERAND1: Code of the 1st randomly-selected non-formal learning activity

Short description

This variable refers to the 1st randomly-selected non-formal learning activity in which the respondent participated among all (7 at maximum) non-formal learning activities reported previously

Standard question

-

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
01-07	Identification code of the activity; same as in the variables NFEACTxx
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months (NFENUM ≥ 1)
- Reference period Last 12 months
- Concept -
- Technical issues The identification code of the randomly-selected non-formal learning activity should coincide with the coding (xx) in variables NFEACTxx (xx = 01 to 07)

Rationale

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Issues and developments

-

Good practices

Data collection through interviews.

The selection **has to be random** and not based on a non-statistical principle. In particular, **chronological order of the non-formal learning activities is not at all eligible as a selection criterion** – see section 4.2 of this manual for further details on the random selection procedure.

NFERAND1_TYPE: Type of the 1st randomly-selected non-formal learning activity

See the variable NFEACTxx_TYPE

In all the variables concerning the randomly-selected activities, the terms '1st activity' actually stand for '1st randomly-selected' activity'. They are kept shorter for the sake of a non-redundant interviewing.

NFEFIELD1: Field of the 1st non-formal learning activity

Short description

This variable indicates the field of the 1st randomly-selected non-formal learning activity

Standard question

What was the field of the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
00	Generic programmes and qualifications
01	Education
02	Arts and humanities
03	Social sciences, journalism and information
04	Business, administration and law
05	Natural sciences, mathematics and statistics
06	Information and Communication technologies (ICTs)
07	Engineering, manufacturing and construction
08	Agriculture, forestries, fisheries and veterinary
09	Health and welfare
10	Services
99	Unknown
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Classification of fields of education and training, at level 1 of the classification. Subdivisions of the classification of fields of education and training can be used on an optional basis.

The version used for 2016 AES is the 2013 ISCED Fields of Education Classification. Full classification available on the following link: <http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf>

- Definition
- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months (NFENUM ≥ 1)
- Reference period Last 12 months
- Concept The field of the 1st randomly-selected non-formal learning activity
- Technical issues -

Rationale

-

Issues and developments

-

Good practices

Data collection through interviews.

NFEDIST1: Distance learning for the 1st non-formal learning activity

Short description

This variable indicates whether the 1st randomly-selected non-formal learning activity was organised mainly as distance learning

Standard question

Was the 1st non-formal learning activity organised mainly as distance learning?

Coding

- Transmission codes

Codes	Labels
1	Yes
2	No
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months (NFENUM \geq 1)
- Reference period Last 12 months
- Concept Distance learning mainly used in the most recent non-formal learning activity
Distance Learning: learning that takes place via postal correspondence or electronic media, linking instructors or students who are not together in a classroom. For this there is interaction between the teacher and the student, although it doesn't happen immediately but with a delay. *Comments: Distance learning is opposed to other learning patterns such as face-to-face learning, but both are taught learning settings* (based on: European Foundation for the Improvement of Living and Working Conditions)
Mainly: respondents should consider that the learning was **mainly** organised as distance learning when this particular mode of learning was used at least 50 % of the instruction time
- Technical issues The question concerns the main method of learning. The fact that during the distance education study there were some meetings organised in order to consult the coach or for some lectures should not change the classification of the activity as distance education if the learning was mainly (at least 50 %) organised as distance learning.

Rationale

The initiative on Opening up Education (*Opening Up Education: Innovative teaching and learning for all through new technologies and open educational resources (COM(2013) 654 final)*) aims at better integrating ICT in education and training systems, in particular exploiting the potential of online learning resources, especially freely available Open Educational Resources (OER).

In spite of an explosion of OER, like the Massive Open Online Courses (MOOCs), in recent years, there are no reliable data about their real demand. It is relatively easy to obtain data about the number

of users of different platforms, but not to estimate the real use of digital technologies and Internet for learning, the time compared with other activities, and what is the educational context of their use (e.g. for formal or non-formal learning, for different fields of learning), etc.

To make the best use of AES and cover important gaps in existing evidence a major change was discussed by the 2016 AES Task Force consisting in a revision of the whole ICT part, to better cover the phenomena of the use of ICT tools for learning rather than ICT usage in general.

On the other hand, questions on ICT usage in general are not often cross-tabulated with education variables in the AES, and it therefore seems more suitable and sufficient to use the Community Survey on the usage of ICT in households and by individuals to collect data on ICT usage in general.

It was therefore proposed to remove the ICT variables from AES (ICTCOMPUTER, ICTINTERNET) and to introduce new variables on the method of learning replacing the former variables on the method used for the learning (FEDMETHOD and NFEMETHODxx) focusing more on ICT-related concepts.

The variable NFEMETHODxx aimed to differentiate between traditional teaching and distance learning. Furthermore they aimed to distinguish between distance learning using online or offline computer and distance learning using traditional teaching material.

The outcome of the discussion during one of the Task Force meetings (December 2013) was that it is still important to be able to distinguish distance learning from non-distance learning, and to identify participation in distance learning through online courses. However, it would be better not to refer to traditional teaching or traditional learning material anymore.

The data collected on the method of learning is more relevant to policy needs if it also captures the use of online learning resources. But unlike the variable for formal education and training (FEOERA), the one on non-formal education (NFEOERA1) and training is a simple binary question instead of a frequency scale.

Issues and developments

-

Good practices

Data collection through interviews.

NFEDISTOL1: Distance learning for the 1st non-formal learning activity organised as an online course

Short description

This variable indicates whether the 1st randomly-selected non-formal learning activity which was mainly organised as distance learning was organised as an online course

Standard question

Was this distance learning mainly organised as an online course?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (NFEDIST1 ≠ 1)

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months ($NFENUM \geq 1$) which was mainly organised as distance learning ($NFEDIST1 = 1$)
- Reference period Last 12 months
- Concept Distance learning embodied by online courses
Doing an online course reflects both the learner being distant from the place (organisations or employer) where courses can be attended in person (often but not necessarily done from home) and the interaction with teachers, trainers and/or learning material materialising via the Internet. The use of e-learning software programmes can also play a role provided that they are connected to the Internet ('online').
- Technical issues

Rationale

See NFEDIST1

Issues and developments

-

Good practices

Data collection through interviews.

NFEOERA1: Use of online educational resources for the 1st non-formal learning activity

Short description

This variable refers to the use of online resources for the 1st randomly-selected non-formal learning activity

Standard question

Have you used online educational resources for the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (NFENUM = 0)

- Classification used Not applicable

Definition

- Filter All participants in non-formal education and training and not only those who learnt through distance learning mainly.
- Reference period Last 12 months
- Concept Use of online resources
- Technical issues -

Rationale

See NFEDIST1

Issues and developments

-

Good practices

Data collection through interviews.

NFEOERB1: Interaction with other people through the internet for the 1st non-formal learning activity

Short description

This variable refers to the interaction with other people (e.g. teachers, learners) through educational websites/portals for the 1st randomly-selected non-formal learning activity

Standard question

Did you interact with other people (e.g. teachers, learners) through educational websites/portals for the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (NFENUM = 0)

Definition

- Filter All participants in non-formal education and training and not only those who learnt through distance learning mainly.
- Reference period Last 12 months
- Concept Use of online resources
- Technical issues -

Rationale

See NFEDIST1

Issues and developments

-

Good practices

Data collection through interviews.

NFEREASON1: Reasons for participating in the 1st non-formal learning activity

Short description

This variable provides information on the reasons for which the respondent participated in the 1st randomly-selected non-formal learning activity

Standard question

What were the reasons for participating in the 1st non-formal learning activity? (mark all that apply)

Coding

- Transmission codes

There should be **14 variables transmitted on the whole**: NFEREASON1, NFEREASON1_1a, NFEREASON1_1b, NFEREASON1_02, NFEREASON1_03, NFEREASON1_04, NFEREASON1_13, NFEREASON1_11, NFEREASON1_06, NFEREASON1_07, NFEREASON1_08, NFEREASON1_09, NFEREASON1_10, NFEREASON1_12

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
NFEREASON1	0	None of the items below
	-1	No answer
	-2	Not applicable (NFERAND1 = -2)
NFEREASON1_01a	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (NFERAND1=-2), -1 if there is no answer	To do my job better
NFEREASON1_01b		To improve my career prospects
NFEREASON1_02		To be less likely to lose my job
NFEREASON1_03		To increase my possibilities of getting a job or changing a job/profession
NFEREASON1_04		To start my own business
NFEREASON1_13		Because of organisational and/or technological changes at work
NFEREASON1_11		Required by the employer or by law
NFEREASON1_06		To get knowledge/skills useful in my everyday life
NFEREASON1_07		To increase my knowledge/skills on a subject that interests me
NFEREASON1_08		To obtain certificate
NFEREASON1_09		To meet new people / for fun
NFEREASON1_10		For health reasons
NFEREASON1_12		To do voluntary work better

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
Reasons 1a, 1b, 2, 3, 4 and 13 should only be asked if the activity is job-related (NFEACTxx_PURP = 1).
- Reference period Last 12 months
- Concept Reasons for participating in the 1st randomly-selected non-formal learning activity

- Technical issues This variable should be implemented as a multiple choices question. For further guidance on the coding of this variable, please refer to the AES Codebook.

Rationale

-

Issues and developments

-

Good practices

Data collection through interviews.

NFENBHOURS1: Volume of instruction of the 1st non-formal learning activity – Number of hours

Short description

This variable refers to the total number of instruction hours the respondent has attended for the 1st randomly-selected non-formal learning activity

Standard question

How many instruction hours did you receive for the 1st non-formal learning activity during the last 12 months?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
3 digits	Total number of instruction hours
-1	No answer
-2	Not applicable (NFERAND1 = -2)

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months
- Concept

Number of instruction hours

We are interested in the volume of the programme the respondent participated in during the last 12 months. It may be difficult to measure this time (some of the programmes have compulsory number of hours a person should participate in, but calculated for all the programme duration or for the duration in the school year and not for the last 12 months). So we should rather ask about number of hours the respondent really attended during the last 12 months.
- Technical issues The respondent may find it difficult to provide a precise number of hours. He/She may also forget about his/her absence caused by illness, professional duties, etc. An alternative solution to compute the number of hours is proposed in the item 'Good Practices' below.

Rationale

-

Issues and developments

-

Good practices

- Data collection through interviews.

- Alternatively to the variable NFENBHOURS1, the interviewer may ask both NFENBWEKS1 (number of weeks) and NFEDURPERWEEK1 (average number of instruction hours per week) to compile the NFENBHOURS1 variable. Proposed ways of asking questions for this variable:
 - *How many weeks during the last 12 months you participated in the “include the name of the program/course”? (NFENBWEKS1)*
 - *What was the number of instruction hours per week on average? (NFEDURPERWEEK1)*

Only the number of hours (NFENBHOURS1) should be transmitted to Eurostat.

- In case of difficulties to properly answer and in order to avoid non-response, the interviewer could ultimately ask for the best estimate that the respondent can provide.

NFEPROVIDER1: Provider of the 1st non-formal learning activity

Short description

This variable indicates the provider of the 1st randomly-selected non-formal learning activity

Standard question

Who was the provider of the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Formal education institution
2	Non formal education and training institutions
3	Commercial institution where ET is not the main activity (e.g. equipment suppliers)
4	Employer
5	Employers' organisations, chambers of commerce
6	Trade unions
7	Non-profit associations, e.g. cultural society, political party
8	Individuals (e.g. students giving private lessons)
9	Non-commercial institution where ET is not the main activity (e.g. libraries, museums, ministers)
10	Other
-1	No answer
-2	Not applicable (NFERAND1= -2)

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months
- Concept Provider of the 1st non-formal learning activity
- Technical issues It can be difficult for the respondent to understand the definition of “training provider”. Ideally, this should be an open question to be post-coded using given categories. Each country is also encouraged to use a national list of providers, which can then be coded according to the proposed categories.
 - The provider of education is defined as an enterprise/municipality/governmental authority/private person which provides the teacher, lecturer or instructor for the learning activity.
 - The place for learning activity or the organisation/enterprise that paid for the learning activity should consequently not be stated.

Rationale

-

Issues and developments

-

Good practices

Data collection through interviews.

NFECERT1: Certificate after the 1st non-formal learning activity

Short description

This variable refers to the certificate obtained by the respondent after the completion of the 1st randomly-selected non-formal learning activity

Standard question

Does the 1st non-formal learning activity lead to a certificate? If yes, was this certificate required by employer or professional body for the execution of current or planned activity as employer or employee?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes, required by the employer or a professional body or by law
2	Yes, not required by the employer or a professional body or by law
3	No (acknowledgement of attendance)
-1	No answer
-2	Not applicable (NFERAND1 = -2)

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months
- Concept Certificate obtained after the 1st activity
This question assesses whether the certificate obtained by the respondent for the completion of the 1st non-formal learning activity was required by the employer/professional body/law or not.
- Technical issues As this variable mixes binary 'Yes/No' information with further details for the 'Yes' category, the question can be split in two.

Rationale

The variable allows identifying whether a qualification was obtained or will be obtained (if the activity normally leads to a certificate).

Issues and developments

-

Good practices

Data collection through interviews.

NFEPAID1: Payment for the 1st non-formal learning activity

Short description

This variable refers to the payment for tuition, registration, exam fees, expenses for books or technical study means for the 1st randomly-selected non-formal learning activity

Standard question

Which one of the following cases best describes the payment for tuition, registration, exam fees, and expenses for books or technical study means, regarding your studies for the 1st activity?

Coding

- Transmission codes

Codes	Labels
1	Fully paid by yourself
2	Partly paid by yourself and partly by somebody else
3	Fully paid by somebody else
4	Free activity
5	You do not know
-1	No answer
-2	Not applicable (NFERAND1 = -2)

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months but payments beyond this period should also be included if they refer to the learning activity (fees might have to be paid prior to the start of the learning activity)
- Concept Respondent involved or not in paying for the most recent non-formal learning activity
In categories 2 and 3, '*somebody else*' may refer to a relative, a friend but also to the employer for instance. If somebody else is involved in the payment (categories 2 and 3), then the next question NFEPAIDBY1 aims at knowing who was in charge of contributing to the payment.
- Technical issues In the 2011 AES, this variable was only included in the AES standard questionnaire: it was not part of the list of variables of the Commission Regulation. For sake of clarity, the 2016 AES Task Force recommended to introduce it into the list of variables of the 2016 AES wave and to remove the variable NFEPAIDFULL1 instead. In the 2011 AES, a category for 'free activities' was missing as reported by many national coordinators of the AES. Therefore an extra 'free activity' category has been added here.

Rationale

See rationale for NFEPAIDBY1 hereafter.

Issues and developments

-

Good practices

Data collection through interviews.

NFEPAYBY1: Partial or full payment for the 1st non-formal learning activity

Short description

This variable indicates the person/service that provided partial or full payment for the tuition, registration, exam fees, expenses for books or technical study means for the 1st randomly-selected non-formal learning activity

Standard question

Which one of the following entities paid in-part or in-full for tuition, registration, exam fees, and expenses for books or technical study means, regarding your studies for the 1st non-formal learning activity? (mark all that apply)

Coding

- Transmission codes

There should be **5 variables transmitted on the whole**: NFEPAYBY1, NFEPAYBY1_1, NFEPAYBY1_2, NFEPAYBY1_3, NFEPAYBY1_4

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
NFEPAYBY1	0	None of the items below
	-1	No answer
	-2	Not applicable (NFERAND1 = -2 or (NFEPAYD1 ≠ 2 or 3))
NFEPAYBY1_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (NFENUM=0 or (NFEPAYD1≠2 and NFEPAYD1≠3)), -1 if there is no answer	Employer or prospective employer
NFEPAYBY1_2		Public Employment Services
NFEPAYBY1_3		Other public institutions
NFEPAYBY1_4		A household member or a relative

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2 and (NFEPAYD1 = 2 or 3)).
- Reference period Last 12 months but payments beyond this period should also be included if they refer to the learning activity (fees might have to be paid prior to the start of the learning activity)
- Concept Partial or full payment for the most recent non-formal learning activity
This variable concerns the situation when the direct expenses, which were expected to be paid by the respondent, were fully or partly paid by some other party. In case the worker was employed by a member of his/her household and received financial support from the household but as an employee this should be treated as employer and not household support. In case the respondent was self-employed when participating in the non-formal learning

activity and financed the expenses from his/her company sources, that should be coded as employer's support (either full or part).

Technical study means are all the helpful materials respondent was buying for the study, so computer, software, CDs, DVDs, drawing boards (for courses on architecture), clay, etc.

- Technical issues The coding of this variable was changed compared to the 2011 AES Commission regulation in order to improve the data collection on payment. A new variable NFEPaid1 was introduced in the 2016 AES Commission Regulation before NFEPaidBY1 (it was inspired by the 2011 AES questionnaire which had been already enhanced accordingly in spite of the absence of the variable in the 2011 AES Commission Regulation). The information previously collected via NFEPaidFULL1 is now obtained through NFEPaid1, therefore NFEPaidFULL1 is removed compared to the 2011 AES.

When the employer was involved in the payment this variable becomes redundant with NFEACTxx_PAIDBY (see Issues and developments below).

In case a respondent takes a business on their own account – therefore considered a self-employed – and works for one company only, if they participated in a course organised and partially or fully paid by this latter company then variable NFEPaidBY1_1 'Paid by the employer or prospective employer' should be selected.

Rationale

The issue of investment in human capital and lifelong learning is very important for the future of learning society in Europe. Although solid information on the cost sharing between different actors (source of financial support) and the effect of these different arrangements on access to education and learning would be highly desirable, a household survey has some limitations as a data gathering instrument for these questions.

Issues and developments

In order not to collect the same information twice, we recommend to apply the following automatic coding when the employer was involved in the payment:

If NFEACTxx_PAIDBY = 1 then NFEPAYDBY1_1 = 1.

Good practices

Data collection through interviews.

NFEPAIDVAL1: Costs paid for 1st non-formal learning activity

Short description

This variable refers to the costs paid personally or by any household member or relative for tuition, registration, exam fees, books, and/or technical study means regarding studies in the 1st randomly-selected non-formal learning activity

Standard question

How much did you personally or any member of your household or relative pay for tuition, registration, exam fees, and expenses for books or technical study means, regarding your studies for the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
	In Euros
-1	No answer
-2	Not applicable [NFEPAID1 ≠ 1 and NFEPAID1 ≠ 2 and (NFEPAID1 = 3 and NFEPAIDBY1_4 ≠ 1)]

- Classification used Not applicable

Definition

- Filter All respondents who participated in at least one non-formal learning activity during the last 12 months ($NFENUM \geq 1$) which was paid either in part or full by themselves or a household member or a relative ($NFEPAID1 = 1$ or $NFEPAID1 = 2$ or ($NFEPAID1 = 3$ and $NFEPAIDBY1_4 = 1$))
- Reference period Last 12 months but payments beyond this period should be included if it relates to the selected activity within the last 12 months
- Concept Costs paid for the 1st non-formal learning activity given in Euros
- Technical issues The reference to the Euro conversion rates will be added in the next version of the manual (for countries outside the Euro Area)

Rationale

-

Issues and developments

-

Good practices

- Data collection through interviews.
- In order to help the respondents to give the total costs, the interviewer should recall each component separately with a pause between each type of cost: tuition, registration, exam fees, and expenses for books or technical study means.
- In case of difficulties to properly answer and in order to avoid non-response, the interviewer could ultimately ask for the best estimate that the respondent can provide.

NFEUSEA1: Current use of skills/knowledge from the 1st non-formal learning activity

Short description

This variable assesses the **current** use of skills or knowledge acquired from the 1st randomly-selected non-formal learning activity

Standard question

How much are you **currently** using the skills or knowledge that you acquired from the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	A lot
2	A fair amount
3	Very little
4	Not at all
-1	No answer
-2	Not applicable (NFERAND1 = -2)

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months
- Concept The **current** (at the moment of the interview) use of skills/knowledge acquired from the 1st non-formal learning activity
- Technical issues -

Rationale

Information on the usefulness of skills and knowledge acquired from non-formal learning activities may determine which activities offer the greatest benefit on the life and work of participants. It can, thus, provide motivations for participating in such activities.

Issues and developments

-

Good practices

Data collection through interviews.

NFEUSEB1: Expected use of skills/knowledge from the 1st non-formal learning activity

Short description

This variable assesses the **expected** use of skills or knowledge acquired from the 1st randomly-selected non-formal learning activity

Standard question

How much are you **expecting** to use the skills or knowledge that you acquired from the 1st non-formal learning activity?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	A lot
2	A fair amount
3	Very little
4	Not at all
-1	No answer
-2	Not applicable (NFERAND1 = -2)

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months
- Concept The **expected** (at any moment after the interview) use of skills/knowledge acquired from the 1st non-formal learning activity
- Technical issues -

Rationale

See NFEUSEA1

Issues and developments

-

Good practices

Data collection through interviews.

NFEOUTCOME1: Outcomes of the 1st non-formal learning activity

Short description

This variable indicates the outcomes of the new skills/knowledge acquired through the 1st randomly-selected non-formal learning activity

Standard question

Have the new skills/knowledge acquired through the 1st non-formal learning activity helped you in any of the following ways? (*mark all that apply*)

Coding

- Transmission codes

There should be **8 variables transmitted on the whole**: NFEOUTCOME1, NFEOUTCOME1_1, NFEOUTCOME1_2, NFEOUTCOME1_3, NFEOUTCOME1_4, NFEOUTCOME1_5, NFEOUTCOME1_6, NFEOUTCOME1_7

Variable name	Codes	Labels
NFEOUTCOME1	0	None of the items listed below
	-1	No answer
	-2	Not applicable (NFERAND1 = -2)
NFEOUTCOME1_1	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (NFERAND1=-2), -1 if there is no answer	Getting a (new) job
NFEOUTCOME1_3		Higher salary/wages
NFEOUTCOME1_2		Promotion in the job
NFEOUTCOME1_4		New tasks
NFEOUTCOME1_5		Better performance in present job
NFEOUTCOME1_6		Personal-related reasons (meet other people, refresh your skills on general subjects, etc.)
NFEOUTCOME1_7		No outcome yet

- Classification used Not applicable

Definition

- Filter All respondents for whom there was at least one randomly-selected non-formal learning activity (NFERAND1 ≠ -2).
- Reference period Last 12 months
- Concept The outcomes of new skills/knowledge acquired through the 1st non-formal learning activity
Outcomes, in general, refer to what is ultimately achieved by an activity, as distinct from its outputs which relate to more direct or immediate objectives.
- Technical issues The order of categories 2 and 3 are changed compared to the 2011 AES in order to enhance the logic of the questionnaire, **but the codes are kept as such compared to the 2011 AES**, this is the reason why NFEOUTCOME1_3 comes before NFEOUTCOME1_2 in the list.

Moreover, in order to avoid any confusion with the use and particularly the new variable on the expected use (NFEUSEB1), it was recommended by the 2016 AES Task Force to remove the category "No outcome expected" from the list.

The term 'reason' in the category NFEOUTCOME1_6 still refers to an outcome (i.e. participating in the learning activity led to getting to know other people and/or refresh skills, etc.).

Rationale

This variable is very important for the survey as it provides information on the outcomes of non-formal learning activities. Such information may be used in order to indicate the most beneficial activities that result in improving the working and living conditions of the individual who participates in such programmes.

Issues and developments

-

Good practices

Data collection through interviews.

DIFFICULTY: Difficulties related to participation (or more participation) in education and training

Short description

Difficulties (with the meaning of obstacles) related to participation (or more participation) in education and training during the last 12 months.

Standard question

During the last 12 months have you experienced difficulties to participate (or participate more) in education and training?

This question should however clearly be addressed differently whether the respondent participated or not in formal or non-formal education and training – see the suggested questionnaire.

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	You participated in formal or non-formal education and did not want to participate more
2	You participated in formal or non-formal education but wanted to participate more
3	You did not participate in formal or non-formal education and training and did not want to participate
4	You did not participate in formal or non-formal education but wanted to participate
-1	No answer

- Classification used Not applicable.

Definition

- Filter None
- Reference period Last 12 months
- Concept

This variable aims at splitting the target population in four groups of people in order to ease the answering process for the questions on difficulties (DIFFTYPE and DIFFMAIN). These four groups are:

 1. Those who already participated and did not want to participate more (deliberately or due to certain factors).
 2. Those who already participated but wanted to participate more (by factors preventing more participation).
 3. Those who did not participate and did not want to participate (deliberately or due to certain factors).
 4. Those who did not participate but wanted to participate (by factors preventing participation).
- Technical issues

When looking at difficulties it is important to differentiate between participants and non-participants. The different groups of people are presented in the table below.

		PARTICIPATED IN EDUCATION AND TRAINING	
		YES	NO
WANTED TO PARTICIPATE / PARTICIPATE MORE IN EDUCATION AND TRAINING	YES	2	4
	NO	1	3

It is advised to address the question differently whether the respondent participated or not in formal or non-formal education and training:

- Those who participated in some kind of activity, either in formal or in non-formal education and training: FED = 1 or NFECOURSE = 1 or NFEWORKSHOP = 1 or NFEGUIDEDJT = 1 or NFELESSON = 1.
- Those who did not participate either in formal or in non-formal education and training: FED = 2 and NFECOURSE = 2 and NFEWORKSHOP = 2 and NFEGUIDEDJT = 2 and NFELESSON = 2.

Therefore the corresponding question in the suggested questionnaire is split into two (DIFFICULTY_A and DIFFICULTY_B).

Rationale

Relevant statistics are needed at policy level on obstacles to participation. The focus is particularly set on two groups: those that did not participate but wanted to and those that did not participate and did not want to. Aggregated statistics by pooling all population together is not very relevant in that extent. Therefore separating the four groups is crucial.

Issues and developments

The implementation of the variable was recognised as difficult in the 2011 AES. This is reflected through the various questions proposed in the standard questionnaire for one unique variable of the Commission Regulation.

The 2011 AES results proved that its implementation needed to be simplified, therefore the questionnaire was updated accordingly (see Section 2).

As this variable is of high relevance at policy level (see Rationale), it is of utmost importance that this variable is properly implemented and non-response avoided as much as possible.

Good practices

See the suggested questionnaire.

NEED: No need for (further) education and training

Short description

This variable assesses whether the reason why respondents who did not want to participate in education and training at all (DIFFICULTY = 3) or did not want to participate more (DIFFICULTY = 1) did not feel like they needed (further) education and training.

Standard question

You did not want to participate (or participate more) in education and training because you did not need (further) education and training. Is it correct?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
1	Yes
2	No
-1	No answer
-2	Not applicable (DIFFICULTY ≠ 1 or 3)

- Classification used Not applicable

Definition

- Filter All respondents who did not want to participate in education and training at all (DIFFICULTY = 3) or did not want to participate more (DIFFICULTY = 1).
- Reference period Last 12 months
- Concept The need for education and training
- Technical issues -

Rationale

In the 2011 AES, the need for education and training was approached through possible obstacles/difficulties (through DIFFTYPE), but it proved to be counterintuitive for respondents.

In order to simplify the questionnaire and clarify the aim of the variable on difficulties, the 2016 AES Task Force recommended to rather isolate the need in a separate variable to be asked first and then focus on obstacles.

Issues and developments

-

Good practices

- Data collection through interviews.
- Like for DIFFICULTY, we recommend to address the question differently whether the respondent participated or not in formal or non-formal education and training – see the suggested questionnaire.

DIFFTYPE: Type of difficulties encountered for any kind of education and training

Short description

Type of difficulty (ies) faced by the respondent willing to participate (more) in education and training resp. experienced with participation/attempt to participate in education and training.

Standard question

Which of the following obstacles prevented you from participation in education and training? (mark all that apply)

Coding

- o Transmission codes

There should be 13 variables transmitted on the whole: DIFFTYPE, DIFFTYPE_1, DIFFTYPE_2, DIFFTYPE_3, DIFFTYPE_4, DIFFTYPE_5, DIFFTYPE_6, DIFFTYPE_7, DIFFTYPE_8a, DIFFTYPE_8b, DIFFTYPE_9, DIFFTYPE_10, DIFFTYPE_12

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
DIFFTYPE	0	None of the items listed below
	-1	No answer
	-2	Not applicable (DIFFICULTY ≠ 2 or 4 and NEED ≠ 2)
DIFFTYPE_01	Each variable is coded: 1 if selected, 2 if not selected, -2 for not applicable (DIFFICULTY ≠ 2 or 4 and NEED ≠ 2), -1 if there is no answer	Difficulty 01 – Prerequisites
DIFFTYPE_02		Difficulty 02 – Cost
DIFFTYPE_03		Difficulty 03 – Lack of employer support or lack of public services support
DIFFTYPE_04		Difficulty 04 – Schedule
DIFFTYPE_05		Difficulty 05 – Distance
DIFFTYPE_06		Difficulty 06 – No access to a computer or internet
DIFFTYPE_07		Difficulty 07 – Family responsibilities
DIFFTYPE_08a		Difficulty 08a – Health
DIFFTYPE_08b		Difficulty 08b – Age
DIFFTYPE_09		Difficulty 09 – Other personal reasons
DIFFTYPE_10		Difficulty 10 – No suitable education or training activity (offer)
DIFFTYPE_12		Difficulty 12 – Negative previous learning experience

- o Classification used Not applicable.

Definition

- o Filter All respondents willing to participate (more) in education and training (DIFFICULTY = 2 or 4) or (NEED = 2)
- o Reference period Last 12 months
- o Concept Difficulties with participation in education and training
These difficulties can be classified in the following way:

- Situational (related to a person's life situation e.g. lack of time because of work, family responsibility, etc.)
 - Institutional (practices and procedures that hinder participation, e.g. fees, lack of evening courses, entrance requirements, etc.)
 - Dispositional (person's attitude towards further learning, lack of motivation)
 - Informational (lack of information about education and learning offers)
- Technical issues

It is **strongly advised** to list the potential difficulties in the question before getting to the question to collect the ones that apply. A person might indeed reply he/she had no difficulty if he/she does not know about the list (e.g. health) while he/she would definitely select one difficulty if a list was proposed to him/her. **Filters or questions like 'did you face difficulties?'** (without any list of potential difficulties) **should therefore be avoided.**

Certain types of difficulties might be considered as unusual. It is advised to give examples to interviewers in order to illustrate what is meant since they should not restrict the list themselves. This is particularly true for people who participated and for which reasons such as age, health, no prerequisites, no suitable activity might not have applied to the first activity they carried out (e.g. short non-formal) but might apply to others (e.g. formal).

The category DIFFTYPE_10 refers to the offer of education and training, and more specifically to the content. It aims at knowing whether the respondent faced problems in finding a learning activity that would satisfy their expectations in terms of topic. It is not related to other issues, such as distance for instance, which are addressed in the other categories.

Rationale

It is of high policy interest to understand the difficulties that respondents face with participation in education and training. This allows taking appropriate actions to facilitate or increase participation in such activities (where necessary). One particular policy issue is to make learning activities more attractive for those who declared they did not want (more) education and training. This group could hide potential discouraged participants.

For a proper data analysis, it is necessary to get additional information on the groups of people identified both thanks to the variables DIFFICULTY (DIFFICULTY = 2 and 4: people who wanted to participate or participate more) and NEED (NEED = 2: people who needed or needed further education and training).

Issues and developments

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Good practices

See the suggested questionnaire.

DIFFMAIN: Most important difficulty encountered for any kind of education and training

Short description

Most important difficulty for not participating (more) in education and training activities for the respondents willing to participate (more) in education and training

Standard question

Among the obstacles that you mentioned previously, which one was the most important?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
3 digits	Code of the difficulty from 01 to 12
-1	No answer
-2	No applicable (DIFFICULTY = 1 or 3)

- Classification used Codes of the difficulty as in the variable DIFFTYPE

Definition

- Filter All respondents willing to participate (more) in education and training (DIFFICULTY = 2 or 4) or (NEED =2)
- Reference period Last 12 months
- Concept Most important obstacle
- Technical issues The most important obstacle will be selected from the list of difficulties (See Table in DIFFTYPE).

Rationale

See Rationale for 'DIFFTYPE'.

Issues and developments

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Good practices

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INF: Informal learning

Short description

Participation in informal learning activities

Standard question

During the last 12 months, apart from the activities mentioned earlier, have you **deliberately** tried to learn anything at work or during your free time to improve your knowledge or skills through any of the following means?

Coding

- Transmission codes

There should be 7 variables transmitted on the whole: INF, INFFAMILY, INFMATERIAL, INFCOMPUTER, INFMEDIA, INFMUSEUM, INFLIBRARIES

<i>Variable name</i>	<i>Codes</i>	<i>Labels</i>
INF	1	Yes
INF	2	No
INFFAMILY	Each variable is coded: 1 if selected, 2 if not selected	Learning from a family member, a friend or a colleague
INFMATERIAL		Learning by using printed material (books, professional magazines, etc.)
INFCOMPUTER		Learning by using computers (online or offline)
INFMEDIA		Learning through television/radio/video
INFMUSEUM		Learning by guided tours in museums, historical or natural or industrial sites
INFLIBRARIES		Learning by visiting learning centres (including libraries)

- Classification used Not applicable

Definition

- Filter None
- Reference period Last 12 months
- Concept Informal learning is always intentional, but is less organised and less structured than formal and non-formal education and training (it is not institutionalised). It may include for instance learning events (activities) that occur in the family, in the work place, and in the daily life of every person, on a self-directed, family-directed or socially-directed basis.
- Technical issues As it is considered a key variable on participation in lifelong learning, the 'No answer' category is not recommended. All six questions should be answered.

Rationale

In the framework of the Lifelong learning approach the issue of informal learning is very relevant and the Adult Education Survey is the only source of information for informal learning. Participation in and characteristics of this kind of activities have proven to be difficult to identify and to measure in both the pilot AES and the 2011 AES. Therefore, in order to still keep a few variables on informal learning, the set of variables were substantially simplified compared to the 2011 AES data collection.

Issues and developments

The 2003 LFS ad hoc module on lifelong learning included a limited set of four methods for informal learning according to the following:

- Making use of printed material (professional books, magazines and the like)
- Computer based learning/training; online internet based web education
- Making use of educational broadcasts or offline computer based material
- Visiting facilities aimed at transmitting educational content (library, learning centre)

Based on these four aspects, six variables had been defined in the pilot AES to cover all types of informal learning through as many specific examples as possible.

The questions on informal learning in the 2011 AES proved to be too complex and too detailed. There were problems to properly define informal learning and to account for borders with non-formal learning. Moreover, there are possible differences in the results across countries depending on how informal learning was perceived by the interviewers and respondents.

The 2016 AES Task Force therefore recommended to simplify and resort to several questions which would be more specific, linked to easy-to-understand examples like in the pilot AES in order to cover all types of informal learning.

Therefore, six sub-questions (INFFAMILY, INFMATERIAL, INFCOMPUTER, INFMEDIA, INFMUSEUM, INFLIBRARIES) are asked to the respondent in order to compute the participation in informal learning (INF).

Sub-question INFMEDIA is intended to cover programmes or material that explicitly serve learning purposes (similar to guided tours in the case of museum visits for INFMUSEUM).

Good practices

The variable on participation in informal learning (INF) is not asked directly. Six different types of informal learning are asked. The variable INF is then derived from the six questions. It is coded '1 – Yes' if at least one of the six variables is coded '1 – Yes'. Otherwise it is coded '2 – No'.

LANGMOTHER: Mother tongue(s)

Short description

Mother tongue(s) of the respondent

Standard question

Which language(s) is (are) your mother tongue(s)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
3 digits	1 - Code of the first language
3 digits	2 - Code of the second language or 000 (none)

- Classification used ISO country classification ([ISO 639-2:1998](#)) for the representation of names of languages

Definition

- Filter None
- Reference period No specific reference period should be mentioned
- Concept Mother tongue(s)

'Mother tongue' refers to the first language learned at home in childhood and still understood by the individual at the time of the survey. The term 'mother tongue' should not be interpreted to mean that it is the language of one's mother. In bilingual homes the language of the father could be the most dominant, in the sense that it is used for in-house communication. Or it could also be that both languages, of mother and father, were used; in which case the person has more than one mother tongue. In some cases or in a few countries mother tongue can be referred to as 'first language'.

There could also be cases that the mother or/and both parents of the respondent died when the respondent was a child; in that case, 'mother tongue' is the language used by the people that raised up the respondent. 'Mother' in the term 'mother tongue' has the meaning of origin.

- Technical issues Although the Regulation asks for 2-digits language codes, it is recommended that a more detailed list of codes is made available to respondents (at 3-digit level to cover as many languages as possible).

Rationale

Language skills information is directly linked with education outcomes and lifelong learning. Lifelong learning policies seek to achieve wide development of the skills required for the knowledge society. The skills most often mentioned include skills of reading, writing and mathematics, as well as learning to learn, Information and Communication Technology (ICT) skills, foreign language skills, technological culture, entrepreneurship and social skills.

The AES 2016 is restricted to self-reporting of language skills.

Interest in mother tongue and other languages that the respondent speaks lies in what concerns the ability of the European citizens to commute within European countries and communicate in an

efficient way. It is therefore of interest to learn about the most commonly used languages at EU level as well as competence for communication of the European citizens.

Issues and developments

The definition of mother tongue has been put in a generic way, so as to cover all exceptionally cases, like mother not in life, mother tongue learnt at very early years but abandoned after the age of 10, for example. In the latter case the first/'mother' language may be forgotten and person communicates today with the language learnt afterwards.

It is therefore necessary to clarify that mother tongue is the tongue for communication that is still alive and that the person is still competent to use it at Level 3, i.e. be able to understand a wide range of demanding texts and use the language flexibly and master the language almost completely.

Good practices

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LANGUSED: Language(s) used other than mother tongue

Short description

All languages used by the respondent except his/her mother tongue(s).

Standard question

How many languages can you use, except you mother tongue(s)? List all languages.

Coding

- Transmission codes

There should be **8 variables transmitted on the whole**: LANGUSED, LANGUSED_1, LANGUSED_2, LANGUSED_3, LANGUSED_4, LANGUSED_5, LANGUSED_6, LANGUSED_7

Variable name	Codes	Labels
LANGUSED	Numeric (0-99)	Number of other languages
	-1	No answer
LANGUSED_1	3 digits	1 - Code of the first language or 000 (none)
LANGUSED_2	3 digits	2 - Code of the second language or 000 (none)
LANGUSED_3	3 digits	3 - Code of the third language or 000 (none)
LANGUSED_4	3 digits	4 - Code of the fourth language or 000 (none)
LANGUSED_5	3 digits	5 - Code of the fifth language or 000 (none)
LANGUSED_6	3 digits	6 - Code of the sixth language or 000 (none)
LANGUSED_7	3 digits	7 - Code of the seventh language or 000 (none)

- Classification used ISO language code list ([ISO 639 alpha-2](#), [ISO 639 alpha-3](#))

Definition

- Filter None
- Reference period No specific reference period should be mentioned
- Concept Language(s) used other than mother tongue
- Technical issues Although the Regulation asks for 2-digits language codes, it is recommended that a more detailed list of codes is made available to respondents (at 3-digit level to cover as many languages as possible).

Rationale

Language skills information is directly linked with education outcomes and lifelong learning.

Lifelong learning policies seek to achieve wide development of the skills required for the knowledge society. The skills most often mentioned include skills of reading, writing and mathematics, as well as learning to learn, Information and Communication Technology (ICT) skills, foreign language skills, technological culture, entrepreneurship and social skills.

The 2016 AES is restricted to self-reporting of language skills.

Issues and developments

We have avoided using the term ‘foreign language’ to describe languages other than mother tongue so that this is not misunderstood by respondents of different cultural background, etc.

There are cases that official languages used in a country are more than one. And if these do not coincide with mother tongue(s), then it is misleading to refer to these languages as 'foreign languages'.

Another example is when, for instance, an English native speaker lives and goes to school in Spain. In such a case Spanish is neither the mother tongue nor foreign language.

Good practices

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LANGBEST1: First best-known language other than mother tongue

Short description

Best-known language out of all languages used by the respondent except his/her mother tongue(s) language.

Standard question

Which of the languages you mentioned before (excluding mother tongue) do you know best?

Coding

- Transmission codes

3 digits	1st language (2digits code)
-1	No answer
-2	Not applicable (LANGUSED = 0, -1)

- Classification used ISO country classification ([ISO 639-2:1998](#)) for the representation of names of languages

Definition

- Filter The respondent knows and can use at least one additional language, other than his/her mother tongue language (LANGUSED \neq 0, -1).
- Reference period No specific reference period should be mentioned
- Concept Self-assessed linguistic skills and literacy performance: talking, understanding, reading and writing for all languages apart from mother tongue(s).
- Technical issues Foreign language skills are determined on the basis of the respondent's own assessment of their skill level. Although the Regulation asks for 2-digits language codes, it is recommended that a more detailed list of codes is made available to respondents (at 3-digit) level to cover as many languages as possible.

Rationale

The rationale behind the language modules is also to measure languages skills with respect to participation in education and training. In addition, measurement of skills levels in languages is important for participation in internet-based courses and also for the purposes of mobility.

Issues and developments

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Good practices

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LANGLEVEL1: First best-known language knowledge (other than mother tongue)

Short description

Level of knowledge of first best-known language used by the respondent other than his/her mother tongue(s) language.

Standard question

Which one of the following cases best describes your knowledge about the first best known language you mentioned before (excluding mother tongue)?

Coding

- Transmission codes

<i>Codes</i>	<i>Labels</i>
0	I only understand and can use a few words and phrases
1	I can understand and use the most common everyday expressions. I use the language in relation to familiar things and situations.
2	I can understand the essential of clear language and produce simple text. I can describe experiences and events and communicate fairly fluently.
3	I can understand a wide range of demanding texts and use the language flexibly. I master the language almost completely.
-1	No answer
-2	Not applicable (LANGBEST1 = -1, -2)

- Classification used The currently used classification of foreign language skill levels is based on the 'Council of Europe scale'.

Definition

- Filter The respondent knows and can use at least one additional language, other than his/her mother tongue language, and has provided the language that he/she best knows (LANGBEST1 ≠ -1, -2).
- Reference period No specific reference period should be mentioned
- Concept Linguistic skills and literacy performance (self-assessed) - talking, understanding, reading and writing for all languages other than mother tongue(s).

The term 'international languages' as used in the 2011 AES proved to be confusing. The 2016 AES Task Force recommended to get rid of such a concept for the 2016 AES.
- Technical issues Foreign language skills are determined on the basis of the respondent's own assessment of their skill level

Rationale

The rationale behind the language modules is also to measure languages skills with respect to participation in education and training. In addition, measurement of skills levels in languages is important for participation in internet-based courses and also for the purposes of mobility.

The most commonly taught languages are recommended to be prioritized in the selection of the languages for skills measurement. Other languages can also be included even if it is not among the list presented.

Issues and developments

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Good practices

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LANGBEST2: Second best-known language other than mother tongue

See the variable LANGBEST1

LANGLEVEL2: Second best-known language knowledge (other than mother tongue)

See the variable LANGLEVEL1

SECTION 4: SURVEY GUIDELINES

This section provides guidance to national authorities about methods and good practices to follow when planning and carrying out their national Adult Education Survey. It is split in three sub-sections. Section 4.1 provides requirements about particular aspects of the AES which must be satisfied by the national implementations. Section 4.2 provides recommendations about the remaining aspects of AES but national authorities may adopt a different approach as long as they meet the requirements mentioned in section 4.1. Finally section 4.3 summarises the timetable of the 2016 AES project.

4.1 Requirements

a) Target population

The target population of the AES consists in individuals living in private households and aged 25 to 64 years. **The recommendations of this manual** regarding coverage, sample sizes, precision of the produced statistics, etc., **refer to this particular population**.

National authorities may expand the surveyed population to younger age groups (18-24) as well as older age groups (65-74 for instance) if they want to, but must pay attention not to lower the quality of statistics about the target population defined above.

People living in institutions, e.g. residential homes for the elderly, nursing homes, prisons, etc., should be excluded from the survey. One of the reasons for this is that access to institutions may be difficult and special arrangements may be required making the survey quite expensive.

The respondent's age is calculated with the following formula:

$$\text{AGE} = \text{int}(((\text{REFYEAR} * 12 + \text{REFMONTH}) - (\text{BIRTHYEAR} * 12 + \text{BIRTHMONTH})) / 12)$$

It is therefore of utmost importance **to select individuals aged 25 to 64 at the time of interview**. This remark is particularly relevant for countries which draw the sample long in advance before the fieldwork period.

b) Reference period

The last 12 months before the interview is the reference period for all variables on the participation in lifelong learning (in formal or non-formal education and training and informal learning) and the detailed description of the learning activities (in formal or non-formal education and training).

c) Sample size and precision requirements

Annex 2 of the AES Commission Regulation (see annex 15 to this manual) sets the precision requirements for key indicators. Annex 10 to this manual presents the corresponding sample sizes required for simple random surveys and participation rates.

d) Selection of non-formal learning activities for detailed information

1.0 Introduction

The first wave of the AES run under a legal framework (2011 AES) took place in 2011 and 2012. For collecting details about formal activities, only the last formal education or training activity was reported and described. As regards non-formal education or training activities, up to 10 activities were reported and up to two activities (or up to three on an optional basis) out of the total number were randomly-selected for detailed information.

Compared to the 2011 AES, the collection of details on formal education and training in the 2016 AES is identical. On the other hand, the collection of details on non-formal education and training is slightly changed.

An analysis of the 2011 AES data showed that the average number of non-formal learning activities was around two for non-formal education and training and that the maximum of non-formal learning activities was extremely rarely superior to 7. In preparation for the new wave, the 2016 AES Task Force recommended to reduce the number of activities for which the type and basic characteristics (see paragraph 3.0 below) would be collected to 7 instead of 10, and to go for the random selection of 2 out of these 7 activities (see paragraph 2.0 below).

In case a respondent participated in more than 7 non-formal learning activities (N activities, N being equal or superior to 8), there could be a random-selection of 7 non-formal activities out of all the activities (i.e. 7 out of N) to be reported through the new variables mentioned in paragraph 3.0 below. Then the usual procedure of random-selection of 2 non-formal learning activities for further details (mentioned in paragraph 2.2 and 2.3 below) would apply to those 7 activities selected.

2.0 Guidelines for selection

2.1 Formal education and training

For formal education and training, the last activity is selected for detailed information. In order to help the respondent, a **good practice** consists in **giving a name** to this learning activity and to refer to it via this name during the part of the interview dedicated to it.

2.2 Non-formal education and training

A random selection of learning activities only applies to the cases when the respondent participated in more than two non-formal education and training activities. There are no pre-criteria or methods imposed for the selection but **it is very important that every activity has an equal chance of being selected** and the process results in the random selection of activities in order to avoid any statistical bias.

- For the computer-assisted (CAPI or CATI) surveys the selection can be done automatically in the data collection software by using the appropriate techniques (random algorithm);
- For web-based surveys, the random selection algorithm can be plugged directly in the features of the web-based application for filling in the questionnaire;
- For the paper-based (PAPI) interviews, random-selection tables can be provided to the respondent (in case of postal questionnaire) or to the interviewer (in case of a face-to-face interview or telephone interview) in order to ease the selection procedure and avoid that respondents systematically pick the longest learning activities and/or the most recent (intuitively those they remember the most at the time of the interview). These tables must be very simple to use in order not to discourage the respondent going through the rest of the questionnaire.

The first two collection modes simplify the random selection process of the non-formal learning activities for they involve the use of computers.

In any case, Eurostat recommends that the method used is documented in the quality report.

2.3 Number of randomly-selected non-formal learning activities

Unlike the 2011 AES wave, the 2016 AES **does not include** detailed information for a third non-formal learning activity on an optional basis.

3.0 New variables on the characteristics of the learning activities

Three new variables were introduced to get information on all of non-formal learning activities the type of which is reported by the respondent (i.e. up to 7 activities). **NFEACTxx_PURP**, **NFEACTxx_WORKTIME**, **NFEACTxx_PAIDBY**. These variables replacing the previous **NFEPURP10**, **NFEWORKTIME10**, **NFEPAIBY10** respectively indicate whether the non-formal learning activities were mainly job related, took place during paid working time and/or were paid by the employer.

Therefore the 2016 AES data collection is improved concerning the basic characteristics of the non-formal learning activities as these three criteria are now known independently for all non-formal learning activities and not only for those that are randomly-selected.

4.2 Recommendations

a) Survey frame

A survey frame (also called the sampling frame in case of a sample survey) is a source used for statistical purposes for accessing the members of the target population. It may be a list of people, such as a population register or a postal address file. It may also be a geographical/geolocalised file like a map of city blocks, which enables the sampling of blocks and subsequently the sampling of people living in selected (drawn) blocks.

What is important is that the frame is of good quality. In order to ensure this the following principles should be applied:

- The frame should adequately **cover** the target population. The population units accessible via the frame comprise the so-called frame population. The produced statistics actually refer to the frame population. Therefore the larger the discrepancies between target and frame population the larger the coverage problems of the frame;
- The frame should contain information that is **up-to-date** with respect to the survey's reference period;
- The frame should use **standardised concepts, definitions and classifications** that are easily understood by the data user;
- The **accuracy** of the frame's data should be assessed in means of:
 - coverage errors (undercoverage, overcoverage and duplication), i.e. what is the extent of missing, out-of-scope or duplicate units on the frame
 - classification errors, i.e. the extent to which all units are properly classifiedBoth coverage and classification errors should be kept at minimum;
- The frame should be **accessible and easy to use**, i.e. its information should also be available electronically and easy to organise (in case different lists/files needed to be combined).

Some guidelines for choosing and making best use of a sampling frame are given below:

- When deciding which frame to use, assess different possible frames at the planning stage of the survey for their suitability and quality;
- Avoid using multiple frames whenever possible (multiple frame can be considered in when no single frame exists as such);
- Include descriptions of the target and survey population, frame and coverage in the survey documentation;
- Monitor the quality of the frame coverage periodically by verifying information during data collection;

- Incorporate frame updates and procedures to eliminate duplication, out-of-scope units and any other changes in the frame information in order to improve and/or maintain the level of quality of the frame throughout the data collection and between waves.

b) Sample design

Depending on the quality of the sampling frame and the auxiliary information that is available countries are advised to use any of the following sampling methods:

- **Simple random sampling (SRS)** in which each person has an equal chance of inclusion in the sample. Its main advantages are:
 - It is the simplest sampling technique
 - No additional (auxiliary) information on the frame is required in order to draw the sample. The only information required is a complete list of survey population and contact information.
 - It needs no technical development, i.e. the theory of SRS is well established and the formulas for determining the sample size, population estimates and variance estimates are easy to use

The main disadvantages of SRS are:

- It makes no use of auxiliary information if this exists resulting to less efficient estimates than if another sample design had been used
 - It can be expensive if personal interviews are used since the sample may be widely spread out geographically
 - It is possible to draw a ‘bad’ sample that is not well dispersed and poorly represents the population since all samples have an equal chance of being included
- **Stratified sampling (STR)** where the population is divided into homogeneous, mutually exclusive groups called strata and then independent samples are selected from each stratum. The advantages of stratified sampling are:
 - It is statistically efficient since it can increase the precision of overall population estimates and guarantee that important subgroups of the population are well represented in the sample
 - It can be operationally or administrative convenient
 - It can protect against selecting a ‘bad’ sample
 - It allows different sampling frames and procedures to be applied to different strata

The main disadvantages of stratified sampling are:

- It requires high quality auxiliary information for all units on the frame (not only for those in the sample but also for those used for stratification). This results to a more costly and complex sampling frame than the one used for SRS
 - It can result in less efficient estimates than SRS for survey variables that are not correlated to stratification variables
 - Estimation is slightly more complex than SRS
- **Multi-stage cluster sampling** where a sample is selected in two or more successive stages. A common multi-stage sampling involves a two-stage cluster sampling: At the first stage, the primary sampling units are selected (PSU’s), e.g. city blocks and at the second stage, the second stage units (SSU’s) units are selected, e.g. dwellings in the city block.

The advantages of a multi-stage sampling are:

- It can greatly reduce the travel time and cost of personal interviews as a result of the sample being less dispersed than SRS

- It is not necessary to have a frame for the entire population. All that is needed is a good frame at each stage of sample selection

The disadvantages of the multi-stage sampling are:

- It is not as statistically efficient as a SRS
- The final sample size is not known in advance since it is not usually known how many units are within a cluster until the survey has been conducted
- Its formulas for calculating estimates and sampling variances can be complex

c) Data collection methods

The basic data collection methods are:

- Postal questionnaire
- Web-based questionnaire
- Face-to-face interviews
- Telephone interviews

For the first two collection methods among the four listed above the respondent fills in the questionnaire without the assistance of an interviewer. In this case, the questionnaire is delivered to and returned by the respondent by mail (postal questionnaire) or electronically (web-based questionnaire).

This is usually the least expensive form of data collection, but not the best one since it often has low response rates and it is also time consuming, particularly if the questionnaire is delivered and returned by mail (it requires a lot of post treatment of the data).

In the case of a web-based questionnaire, the respondents may not represent the total adult population due to differences in age, educational attainment level, etc. while there are many of them who do not use the internet.

On the other hand, the latter two data collection methods are done either in person, i.e. an interviewer assists the respondent to fill in the questionnaire at the respondent's residence or place of work or over the telephone. Both can be either paper-based (PAPI) or computer-assisted (CAPI or CATI). The main advantage of computer-assisted methods is that data collection and capture are combined. However, considerable time and cost is required to develop the computer application.

The main advantage of face-to-face interviews (PAPI or CAPI) is the reduction of measurement errors, i.e. errors due to the misunderstanding of a question or a concept definition, since the interviewer assists the respondent to fill in the questionnaire. Such interviews are recommended for surveys with complex or extensive questions and they can yield high response rates. The main drawback is the high cost required not only for developing the computer application for CAPI but also for visiting respondents (especially when he/she cannot be reached over the phone or he/she has a low literacy level).

On the other hand, telephone interviews (PAPI or CATI) are less expensive than face-to-face ones and it takes less time to conduct them. They can cover a bigger geographical area. However, it might appear problematic if the list of telephone numbers from which the sample is drawn is out-of-date or the random digit dialling is inefficient.

For the reasons mentioned above, **it is recommended to use an interviewer-assisted method (personal or telephone interview)** when collecting data for the AES due to the nature of its questions.

It is preferable to use a personal (face-to-face) interview and in particular computer-assisted (CAPI) in order to eliminate mistakes and inconsistencies already in the fieldwork. The computer-assisted methods are an excellent approach to the random-selection of the non-formal learning activities for further questions. However, when this is not feasible, a telephone or web interview can be conducted or even a combination of a personal and telephone interview (the latter can be used for the follow-up of the respondents).

d) Proxy interviews

Eurostat strongly recommends avoiding proxy interviews. Regulation states that proxy answer shall be avoided whenever possible (regulation 452/2008).

Indeed, the Adult Education Survey is focused on individuals and their participation in lifelong learning which is a topic closely linked to personal lifestyle and personal behaviour towards learning. Therefore in case of a proxy interview it might be very difficult for a relative/other member of the household to know about the participation of the respondent (especially for education and training that occurred at the workplace).

Pre-information policies, call backs and appropriate introduction of the survey could help convincing selected individuals to respond (justification of the survey, including usefulness for policies).

e) Data processing

Data processing of the incoming questionnaires should be carried out by the national authorities. Specifically, once data has been collected, countries must ensure that all necessary information has been received and legibly recorded, that interviewer notes have been reviewed and some preliminary edits have been performed to eliminate obvious errors and inconsistencies.

Then coding should be carried out during which any written answers to open questions should be coded into the system. After coding, the data should be captured electronically into a computer (in case a PAPI data collection method was used) and more coding may be carried out.

The data processing is then going on with detailed editing and imputation. Questionnaires that fail one or more checks should be put aside for further examination, either for a follow-up from the respondent or for imputation.

Moreover, outlier detection should be carried out to identify suspicious or extreme values. Finally, the data should be stored on a database to facilitate data manipulation during the post-processing activities.

f) Editing

Data editing involves validity and consistency edits. The former kind of edits verify the syntax of responses including checking of non-numeric characters reported in numeric fields and checking for missing values. Moreover, validity edits can check that the coded data lies within an allowed range of values, e.g. the respondent's age should range between 0 and 125.

On the other hand, consistency edits verify that the relationship between questions (i.e. the logical flow of questions) is respected, e.g. if a person is not carrying out a job or profession they cannot declare a professional status.

g) Imputation

Imputation is the process used to determine plausible values for replacing missing, invalid or inconsistent data. The following are some guidelines for imputation:

- Imputed records should closely resemble the failed edit record. To achieve this, the minimum number of variables is imputed preserving as much as possible original data;

- Imputed values should be flagged and the methods and sources of imputation should be clearly identified. Both imputed and initial values should be kept until the dataset is made final in order to assess the impact of imputation;
- Imputed records should satisfy all edits;
- The imputation methods should be chosen carefully taking into account the type of data to be imputed;
- The imputation method should aim to reduce non-response bias and preserve the relationship between variables as much as possible;
- The imputation system should be specified, programmed and tested in advance;
- The imputation system should be able to handle any pattern of missing or inconsistent fields;
- For donor imputation methods, the imputed record should closely resemble the donors selected. This will ensure that the combination of imputed and original responses for the record subject to imputation not only satisfies the edits but is also plausible.

h) Estimation and weighting

When estimating the parameters of interest, i.e. totals, means or proportions, countries should consider the following important points:

- Estimation must take into account the sample design. Therefore, design weights, defined as the inverse of the unit's inclusion probability, should be incorporated in the estimation process;
- The initial design weights should be adjusted for non-response;
- Auxiliary information of adequate quality and correlated with the main survey variables, should be used whenever possible to improve the consistency and precision of the estimates;
- The sample design and sample allocation should be used to meet the requirements of domains of interest. If this is not possible at the design stage, special estimation methods should be considered at the estimation stage;
- Outlier detection and treatment should be considered in estimation since outliers can lead to large variability in the estimates;
- Survey estimates should include an estimate of their sampling error in the form of sampling variance, standard error, coefficient of variation, margin error or confidence interval.

This applies to both results on individual and non-formal learning activities in the Adult Education Survey which are grossed-up by two different weighting factors.

- Weighting factor for individuals (RESPWEIGHT)

In the Adult Education Survey, respondents' weighting factors are calculated according to standard weighting systems depending on the sampling techniques in each country. Generally, demographic characteristics like age, sex or region is used in the weighting. These weights are computed according to the selection probabilities.

The individual weighting factor is the inverse of the individual inclusion probability. The final weighting factor for the individuals is a product of the individuals design weighting factors and the coefficient for re-weighting (to take into account non-response and/or calibration).

Individual weighting factors are used when calculating indicators which are relevant for individuals (e.g. the number of participants in formal and non-formal education and training) and have to be included in the microdata to be transmitted to Eurostat.

- Weighting factor for non-formal learning activities (NFEACTWEIGHT)

Data on up to 7 activities are collected in the 2016 Adult education survey for non-formal education and training. There is a random selection of **two** activities for more detailed information or at least one activity if the individual has taken part in one non-formal learning activity only.

The regulation proposes one unique weighting factor named NFEACTWEIGHT for the non-formal learning activities. It can be used to calculate indicators which are relevant for non-formal learning activities for example the average duration of learning activities.

Eurostat applies the following rule to calculate the weighting factor NFEACTWEIGHT for a given activity.

$\text{NFEACTWEIGHT} = \text{RESPWEIGHT} * (\text{NFENUM} / \text{number of selected NFE activities (NFERANDx > 0)})$

Example:

NFEACTWEIGHT

$$= \text{RESPWEIGHT} * (\text{NFENUM} / \text{NFENUM}) = \text{RESPWEIGHT}$$

if the individual participated in 1 or 2 activities (then they will all be selected for further details)

$$= \text{RESPWEIGHT} * (\text{NFENUM} / 2).$$

if the individual participated in at least 3 activities (a maximum of 2 will be selected to represent all of the individual's activities)

If a respondent participated in many non-formal learning activities, the weights will be higher.

The sum of all **NFEACTWEIGHT** of the sample represents all the activities followed by the population of the country during the reference period.

Unfortunately, there is no existing source to know the real number of non-formal learning activities in which people took part (i.e. real margins). If so, the next statistical step would have been to operate a calibration on these margins.

In case some countries decided to use any additional statistical method to calculate these NFEACTWEIGHT (for example to deal with non-response), Eurostat should be informed on this particular implementation and the technique used should be mentioned in the quality report.

i) Multiple choice questions

Unlike the 2011 AES data collection, it is not required to transmit the number of modalities chosen by the respondent when asking a question with multiple answer categories. This simplification aims at reducing the burden for national statistical authorities. The focus is on categories themselves. The main variable shall only be filled in in case there was no suitable answer at all for the respondent (code 0), no answer for non-response (code -1) or when the item was not applicable (code -2).

4.3 Timetable and data transmission to Eurostat

The timing for the 2016 AES as defined in the Commission Regulation is:

- **Fieldwork** (data collection) should be carried out between 1 July 2016 and 31 March 2017;
- **Processing** (including quality control, editing and imputation) and **transmission** of micro-data to Eurostat should take place within 6 months after the survey;

- **Quality reports** should be sent to Eurostat 3 months after the microdata.

The structure of the data is very accurate: all columns should be sorted in a specific order, which is the order of variables in the codebook.

On top of all controls automatically run by national statistical authorities, further checking of the structure of the data and the performance of logical tests are highly recommended by Eurostat. A tool – EDIT – will be made available by Eurostat for that purpose (see paragraph 5.1 hereafter).

Data shall be transmitted in CSV format by means of a secure data transmission application (EDAMIS) the access to which will be made available by Eurostat on request of the national AES coordinators.

SECTION 5: DATA CHECKING BEFORE SENDING THE DATA TO EUROSTAT

5.1 Data checking tool EDIT

Eurostat will prepare a checking tool – EDIT – which will be distributed to countries before the fieldwork period. The objective of this tool will be to achieve a high quality error free dataset. The tool will not be a data entry tool. The format and platform for the tool will be the same as for the 2011 AES. It will be made available through EDAMIS.

The checking tool will implement the data-level, field-level and the record-level checking rules described in the paragraph below. It may contain additional checks should a need become evident in order to guarantee the quality of the AES dataset.

Countries will be able to run the EDIT programme on their dataset before sending the data to Eurostat. This good practice already implemented in the 2011 AES is highly recommended prior to sending the data to Eurostat to avoid further exchanges of the data. On the other hand, Eurostat will use the tool to verify the quality and consistency of delivered national data sets.

Important note: The checking tool will not implement any automatic cleaning of data.
The output of the checking programme is an error report. EDIT will only inform you on structure or logical inconsistencies.

5.2 Logical data checks

Checking rules will be implemented through the Eurostat checking tool EDIT which will be based on the version used for the 2011 AES but updated accordingly. The tool will be made available for countries to check their data before sending them to Eurostat.

3 basic levels of validation checking rules are implemented:

- **Dataset-level checks** – checks of the country dataset as a whole which consists in checking the overall structure of the dataset;
- **Field-level checks** – simple coherence check between the values of a variable for all records and the possible allowed entries. It will detect missing values and incompleteness of the file;
- **Record-level checks** – arithmetic checks to test the consistency between variables for a given record.

In order to succeed in the first of these three types of validation, the data must be sorted in the proper order which is the order mentioned in the code book (see Annex 3).

5.3 Validation of the results

On top of the informatics checking, a set of indicators are defined in a separate “control table” (see Annex 17) to help you checking the main results of the survey at national level.