# Implementation of Adult Education Survey for 2011-2012. Revision of education variables in EU Labour Force Survey

# Final report on action A - Survey design (for AES) 29 February 2012

This report describes:

- the sampling method used for the 2012 French AES
- the sampling method used for the CAPI test conducted in May-June 2011
- the method used to select three non-formal education activities at random when the respondent has participated in four or more.

## 1) Selection of sample for 2012 French AES

## a) Sampling frame and sample composition

## Sampling frame

We selected the sample for the 2012 AES from the Master Sample with INSEE's "Octopusse" application, which serves to draw samples in many household surveys. We based our selection on the enumeration areas (Zones d'Activité Enquêteurs: ZAEs [literally, "areas assigned to enumerators"]) of the 2010 population census survey.

The AES scope of coverage consists of all persons aged 18-64, residing in metropolitan France (mainland + Corsica) in ordinary dwellings (i.e., excluding collective housing such as institutions) qualifying as main residences. To minimize rejects caused by the selection of persons outside the age scope, the dwellings included in the sample comprise at least one occupant born between 1 April 1947 and 30 June 1994.

We interview only one person per household. In households composed of several persons, we choose to interview the first person born on 1 July or later. This criterion ensures the random selection of one person in the dwelling. The sampling plan therefore comprises four levels: annual population census survey, enumeration areas, dwellings, and persons surveyed.

## Sample size

The main AES sample consists of 20,000 "address cards" (Fiches-Adresse: FAs).

We also prepare two back-up samples in the event of an inadequate response rate during the collection period. Their size is equal to 10% of the main sample (2,000 address cards).

Distribution of sample by administrative region:

| Administrative region      | Number of units contributed to sample |       |              |
|----------------------------|---------------------------------------|-------|--------------|
|                            | Main                                  |       | Back-up<br>2 |
| Île-de-France              | 3,961                                 | 379   | 408          |
| Champagne-Ardenne          | 460                                   | 45    | 43           |
| Picardie                   | 636                                   | 67    | 64           |
| Haute-Normandie            | 570                                   | 57    | 63           |
| Centre                     | 819                                   | 89    | 82           |
| Basse-Normandie            | 463                                   | 59    | 49           |
| Bourgogne                  | 524                                   | 57    | 54           |
| Nord-Pas-de-Calais         | 1,321                                 | 142   | 121          |
| Lorraine                   | 778                                   | 86    | 80           |
| Alsace                     | 623                                   | 39    | 55           |
| Franche-Comté              | 388                                   | 40    | 36           |
| Pays de la Loire           | 1,057                                 | 105   | 107          |
| Bretagne                   | 941                                   | 104   | 126          |
| Poitou-Charentes           | 546                                   | 43    | 68           |
| Aquitaine                  | 994                                   | 87    | 88           |
| Midi-Pyrénées              | 895                                   | 85    | 86           |
| Limousin                   | 232                                   | 26    | 31           |
| Rhône-Alpes                | 1,990                                 | 187   | 175          |
| Auvergne                   | 462                                   | 40    | 39           |
| Languedoc-Roussillon       | 738                                   | 89    | 80           |
| Provence-Alpes-Côte d'Azur | 1,496                                 | 162   | 136          |
| Corse                      | 106                                   | 12    | 9            |
| TOTAL                      | 20,000                                | 2,000 | 2,000        |

#### b) Sampling plan

The sampling comprised two stages. In the first, we picked 35,000 dwellings from "Octopusse" without regard to scope restrictions. In the second stage, we partitioned the sample to select 24,000 in-scope dwellings.

The number of address cards per enumeration area cannot be less than 20 or greater than 40.

## c) Weights

We created three sets of weights in the sample file, depending on whether or not the back-up samples are used:

- sampling weights for the dwellings when we use only the main sample, i.e., without drawing on the back-ups
- weights when we used the main sample plus the first back-up but not the second
- weights when we used the main sample plus both back-ups.

We chose each of the new sampling weights so that their sum on the sample eventually used would be equal to the size of the population studied.

The following table summarizes the distribution of dwelling weights calculated on the main sample of 20,000 dwellings when the back-ups are not used:

| Quantile | Value       |  |
|----------|-------------|--|
| Min      | 247.0040148 |  |
| 5%       | 431.3236095 |  |
| Median   | 960.1704454 |  |
| 95%      | 2033.92     |  |
| Мах      | 3506.06     |  |

Sum of weights = 20,303,649

Average of weights = 1015.18245

# 2) CAPI test sample

We conducted a CAPI test for the AES from 16 May to 18 June 2011, involving 22 interviewers in three regions: 7 in Bourgogne, 7 in Limousin, and 8 in Rhône-Alpes.

Each interviewer had 40 address cards plus 10 as back-up, if needed, in order to meet the goal of 20 interviews (see Report B4 for a full description of the CAPI test).

The municipalities chosen for the test complied with the following criteria:

- outside census enumeration areas (ZAEs) (except large municipalities)
- outside Labour-Force Survey areas (except large municipalities)
- included in 2009 population census survey.

To minimize rejects caused by the selection of persons outside the age scope, the dwellings included in the sample comprise at least one occupant aged between 16 and 62 in 2009, therefore between 18 and 64 in 2011 (absent a change in status).

# 3) Random selection of three non-formal education activities

All non-formal education or training activities of respondents who have participated in three at the most are described in detail. For respondents who have participated in four activities or more, we select three at random using the following method:

1) We enumerate all education activities in which the respondent participated, and store them in a table

We enumerate up to:

- 10 courses or group training programmes
- 10 seminars, lectures or workshops,
- 10 private lessons
- 10 guided on-the-job training activities
- 10 additional education or training activities, consisting of courses or group training programmes, relating to cultural or leisure activities not previously mentioned
- 10 additional education or training activities consisting of private lessons relating to cultural or leisure activities not previously mentioned.

We give a name and assign a number to each enumerated activity.

2) We select the first activity by drawing a random value between 1 and the number of cells filled in the table

The random value is drawn from a uniform distribution.

#### 3) We use the same procedure to select the next two activities

If the random value is the number of an activity already selected, we repeat the draw until we select a new activity.