

# EU statistics on income and living conditions (EU-SILC) methodology - environment of the dwelling

Statistics Explained

This article is part of a [set of articles](#) describing the methodology applied for the computation of the statistical indicators pertinent to the subject area of [Environment of the dwelling \(ilc\\_mddw\)](#) within the overall domain of [Income and living conditions](#) . For these indicators, the article provides a methodological and practical framework of reference. The indicators relevant to the subject area of environment of the dwelling concern the following:

- Noise from neighbours or from the street
- Pollution, grime or other environmental problems
- Crime, violence or vandalism in the area

Moreover, since the indicators are of multidimensional structure and can be analysed simultaneously along several dimensions, the separate [datasets](#) providing these indicators along with the different combinations of dimensions are also presented.

## Description

- The indicator on **noise from neighbours or from the street** refers to the percentage of total population who face the problem of too much noise in their dwelling from neighbours or from outside (traffic, business, factory, etc.).
- The indicator **pollution, grime or other environmental problems** refers to the percentage of total population who face the problem of pollution, grime or other environmental problems in the local area such as: smoke, dust, unpleasant smells or polluted water.
- The indicator on **crime, violence or vandalism in the area** refers to the percentage of total population who face the problem of crime, violence or vandalism in the local area.

## Statistical population

The statistical population consists of all persons living in private [private households](#) . Persons living in [collective households and in institutions](#) are generally excluded from the target population.

Households and individuals with missing any of the dimensions are excluded from the calculation.

## Reference period

All indicators are collected and disseminated on an annual basis and refer to the survey year.

The reference period for all dimensions along with the indicators are disseminated is the survey year, except for age, income and household type. As far as age is concerned, it refers to the age of the respondent at the end of the income reference period, based on which the household type is also derived. Income reference period for income variables – with the exceptions of Ireland (moving income reference period) and the UK (survey year).

Additionally, reporting of pollution, grime or other environmental problems, noise from neighbours or from the street and crime, violence or vandalism in the area refers to the survey year.

## Unit of measurement

All indicators presented, related to the environment of the dwelling are given as percentages.

## Dimensions

The indicators presented, i.e. the indicator on noise from neighbours or from the street, on pollution, grime or other environmental problems and on crime, violence or vandalism in the area are disseminated along with the following dimensions:

- household type and income group (total, below 60 % of median equivalised income, above 60 % of median equivalised income)
- degree of urbanisation ([DEGURBA](#)) and income group (total, below 60 % of median equivalised income, above 60 % of median equivalised income).

## Calculation method

### 1. Noise from neighbours or from the street:

The indicator that describes the noise from neighbours or from street presented along with the [dimensions](#)

$(k)[\text{NOISE\_at\_k}]$

is calculated as the percentage of people in each dimension  $k$  who report to be feeling noise from neighbours or from the street ( $HS170=1$ ) over the total population in that  $k$ .

The weight variable used is the Adjusted Cross Sectional Weight (RB050a).

$$[\text{NOISE\_at\_k}] = \frac{\sum_{\text{limits\_for all i}} ; \text{where } HS170=1 \text{ at\_k} \cdot RB050a_i}{\sum_{\text{limits\_for all i}} \text{at\_k}}$$

$$\frac{\text{RB050a}_i}{100}$$

## 2. Pollution, grime or other environmental problems:

The indicator that describes the pollution, grime or other environmental problems presented along with the dimensions (k)  $(\text{POLLUTION}_{at\_k})$

is calculated as the percentage of people in each dimension k who report to be feeling pollution, grime or other environmental problems (HS180=1) over the total population in that k.

The weight variable used is the Adjusted Cross Sectional Weight (RB050a).

$$\text{POLLUTION}_{at\_k} = \frac{\sum_{\text{forall } i} \text{limits}_{\text{where}; \text{HS180}=1} \text{RB050a}_i}{\sum_{\text{forall } i} \text{RB050a}_i} \times 100$$

## 3. Crime, violence or vandalism in the area:

The indicator that describes the Crime, violence or vandalism in the area presented along with the (k)  $(\text{CRIME}_{at\_k})$

is calculated as the percentage of people in each dimension k who report to be feeling crime, violence or vandalism (HS190=1) in the area over the total population in that k.

The weight variable used is the Adjusted Cross Sectional Weight (RB050a).

$$\text{CRIME}_{at\_k} = \frac{\sum_{\text{forall } i} \text{limits}_{\text{where}; \text{HS190}=1} \text{RB050a}_i}{\sum_{\text{forall } i} \text{RB050a}_i}$$

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sum
limits_{
forall i
_at
_k} RB050a_i}
times 100[/math]

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With regard to the calculation of the indicators relevant to the environment of the dwelling, the following methodological issues should be taken into consideration:

- Crime is to be defined as a deviant behaviour that violates prevailing norms, specifically, cultural standards prescribing how humans ought to behave normally. A legalistic approach is not to be used.
- The objective is to assess whether the respondent feels they 'noise from neighbours or from outside' or 'pollution, grime or other environmental problems' or 'crime, violence or vandalism' to be a problem for the household (not on the fact to be bothered by the problem). No common standards what is a problem are defined.

Moreover, there are some methodological limitations that pertain to the following dimensions accompanying the indicators: Household type, Degree of urbanisation.

## Main concepts used

For the production of the indicators relevant to the subject area of the environment of the dwelling, the variables listed below are also involved in computations:

Equivalised disposable Income (EQ\_INC), |Median Equivalised disposable Income after social transfers (MEDIAN20).

Other concepts that should be taken into consideration are the following:

- Noise from neighbours or from the street (HS170) describes the situation where the respondent feels noise from neighbours or from outside to be a problem for the household (not on the fact to be bothered by the problem).
- Pollution, grime or other environmental problems (HS180) describes the situation where the respondent feels pollution, grime or other environmental problems to be a problem for the household (not on the fact to be bothered by the problem).
- Crime, violence or vandalism in the area (HS190) describes the situation where the respondent feels crime, violence or vandalism in the area to be a problem for the household (not on the fact to be bothered by the problem).

## SAS program files

SAS programming routines developed for the computation of the EU-SILC environment of the dwelling datasets along with the different dimensions, are listed below.

Header text	Header text
Noise from neighbours or from the street ( <a href="#">ilc_mddw01</a> )	_mddw01.sas
Pollution, grime or other environmental problems ( <a href="#">ilc_mddw02</a> )	_mddw02.sas
Crime, violence or vandalism in the area ( <a href="#">ilc_mddw03</a> )	_mddw03.sas
Noise from neighbours or from the street by degree of urbanisation ( <a href="#">ilc_mddw04</a> )	_mddw04.sas
Pollution, grime or other environmental problems by degree of urbanisation ( <a href="#">ilc_mddw05</a> )	_mddw05.sas
Crime, violence or vandalism in the area by degree of urbanisation ( <a href="#">ilc_mddw06</a> )	_mddw06.sas

## See also

- [EU statistics on income and living conditions \(EU-SILC\) methodology](#) (overview of all articles)
- [Quality of life indicators - natural and living environment](#)
- [Living conditions in Europe - housing](#)
- [Living conditions in Europe - income distribution and income inequality](#)
- [Living conditions in Europe - poverty and social exclusion](#)

## Main tables

- [Income and living conditions \(t\\_ilc\)](#)

## Database

- [Living conditions and welfare \(livcon\)](#), see:

[Income and living conditions \(ilc\)](#)

[Material deprivation \(ilc\\_md\)](#)

[Durables \(ilc\\_mddu\)](#)

## Dedicated section

[Income and living conditions \(ilc\)](#)

## Publications

- [European social statistics \(2013\)](#) - Statistical books
- [Combating poverty and social exclusion. A statistical portrait of the European Union 2010](#) — Statistical books
- [Income and living conditions in Europe \(2010\)](#) — Statistical books
- [The continuity of indicators during the transition between ECHP and EU-SILC](#)
- [Comparative EU quality reports](#)
- [Modules: assessment of implementation](#)

## Methodology

- [Income and living conditions \(ilc\)](#) (ESMS metadata file — ilc\_esms)
- [Operation guidelines](#)
- [Methodological guidelines and description of EU-SILC target variables](#)

## Legislation

- [Regulation 1177/2003](#) of 16 June 2003 concerning Community statistics on income and living conditions (EU-SILC)
- [Summaries of EU Legislation: EU statistics on income and living conditions](#)
- [Regulation 1553/2005](#) of 7 September 2005 amending Regulation 1177/2003 concerning Community statistics on income and living conditions (EU-SILC)
- [Regulation 1791/2006](#) of 20 November 2006 adapting certain Regulations and Decisions in the fields of ... statistics, ..., by reason of the accession of Bulgaria and Romania

## External links

- [OECD - Better Life Initiative: Measuring Well-being and Progress](#)
- [The social dimension of the EUROPE 2020 strategy - A report of the social protection committee \(2011\)](#)
- [Employment and Social Developments in Europe \(2013\)](#)

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[http://ec.europa.eu/eurostat/statistics-explained/index.php/EU\\_statistics\\_on\\_income\\_and\\_living\\_conditions\\_\(EU-SILC\)\\_methodology\\_-\\_environment\\_of\\_the\\_dwelling](http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_environment_of_the_dwelling)