



EUROPEAN COMMISSION
EUROSTAT

Directorate G: Business and Trade Statistics
Unit G-4: Innovation and digitalisation



ICT Surveys databases

Quick documentation (updated 4.03.2020)

1. Update

Most information given in the initial document (v 11.12.2012) still applies. Some minor changes in the ICT survey databases occurred in 2016, when we migrated to corporate software. Hence, corrections were necessary in this document. You will find them in red, interleaved with the original text.

2. DATABASES

There are 2 files, ENT2.mdb and HH.mdb, with the data from the ICT surveys on enterprises (Nace rev 2.0) and on households/by individuals. All are in Microsoft Access format and have the same structure, described below.

NEW DATABASE STRUCTURE

As of 2011, as the comprehensive databases became bigger and bigger, we have moved to a new, compact structure.

We achieved this goal by removing the text fields from the main tables and replacing them by, small, numeric IDs. The old, text fields can be found in reference tables. For the interested in database design, that is called normalisation. The format of the tables is described in section 3 of this document.

That normalisation has the advantage that the database becomes much more compact, which is an advantage in terms of storage space, download time and response time. Also, we could reintroduce the indexes on the tables, which improved the response time even further.

The drawback is that the database is more difficult to use; each meaningful query needs now joining to 4 or 5 reference tables.

For that reason, we have pre-programmed a few queries, which basically reconstruct the tables in the old format. Those queries are described in section 4 of this document.

Additionally, the codes used in the comprehensive database are now the same as the codes used in Eurobase.

3. TABLES

3.1. "DataWithAggregates" table

The data from the surveys is stored in the table DataWithAggregates. The table has the following structure:

Field	Explanation
IdYear	That is the year the survey was carried on.
IdCountry	The ID of the declaring country. See list of codes in table Countries
IdVariable	The ID of the variable, see list of codes in table Variables
IdBrkDwn	The ID of the breakdown, see list of codes in table BrkDwns
IdUnit	The Id of the unit the value is expressed on. See list of codes in the Units table.
Value	The value, rounded to 4 decimals.
Flags	The flags attached to the value. Flags codes are defined below.
IdNote	The ID of the footnote attached to the value. The footnote in in the Notes table. A null IdNote means the value has no footnote attached to it.

The flags code used are defined as follows:

Flag	Meaning
a	This value is an aggregate computed by Eurostat
c	This value is confidential. It is therefore not published and has not been used to compute the EU aggregates.
m	This value is under embargo. It is therefore not published but has been used to compute the EU aggregates.
u	This value is unreliable. It is therefore not published but has been used to compute the EU aggregates.
x	This value does not come from the Eurostat surveys, but rather from an external source, (e.g. OECD).

From 2017 onwards, only the b, c and u flags are used.

3.2. "NotesWithAggregates" table

On top of footnotes that apply to only one cell, there are footnotes that apply to a variable, to a breakdown or to a whole questionnaire. Those are in the "NotesWithAggregates" table. The table has the following structure:

Field	Explanation
IdYear	That is the year the survey was carried on.
IdCountry	The ID of the declaring country. See list of codes in table Countries
IdVariable	The ID of the variable the footnote applies to, see list of codes in table Variables . An asterisk (*) means the footnote applies to all variables.
IdBrkDwn	The ID of the breakdown the footnote applies to, see list of codes in table BrkDwns . An asterisk (*) means the footnote applies to all breakdowns.
IdNote	The ID of the footnote attached to the value. For the EU aggregates, the footnote is a catenation of the original footnote, prefixed with the country code. For example, if a footnote applies to some German data, the corresponding EU data will have the same footnote, prefixed with "DE:".

3.3. "AggregContents" table

Eurostat computes EU aggregated data, when at least 55% of the countries representing 60% of the population have reported data. That means the user must have a way to know with countries have been used to compute the EU aggregates. That is the purpose of the "**AggregContents**" table. Its structure is as follows:

Field	Explanation
IdYear	That is the year the survey was carried on.
IdCountry	The declaring country.
IdVariable	The variable code.
IdBrkDwn	The breakdown code.
IdUnit	The unit code.
IdIncluded	The ID of a text, which is a list of the countries which have been used in the computation. That text can be found in the Included table. If the aggregate could not be computed because of insufficient data, then the percentage of the countries and of the population are indicated instead.

3.4. "BrkDwns" reference table.

This table lists the breakdown codes used. The breakdown codes are now the Eurobase codes. They are no longer year dependent.

The table structure is as follows:

Field	Explanation
IdBrkDwn	The breakdown ID.
EuBrkDwn	The breakdown code. The Eu prefix has been added as a reminder that it is a Eurobase code.
BrkDwnGroup	The group name the breakdown belongs to. That information is given to allow the easy grouping of the breakdowns that relate together
EuBrkDwnCaption	A descriptive text that explains what the breakdown is about.

3.5. "Countries" reference table.

This table lists the country codes used. The table structure is as follows:

Field	Explanation
IdCountry	The country ID.
EuCountry	The country code. The code can refer to a single country or to a Eurostat computed aggregate. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuCountryCaption	A descriptive text that explains what the country code means.

3.6. "Included" reference table.

This table lists the country codes used. The table structure is as follows:

Field	Explanation
IdIncluded	The ID of the countries included text.
Included	The text which specifies which countries are included in a country aggregate.

3.7. "Notes" reference table.

This table lists the footnotes used. The table structure is as follows:

Field	Explanation
IdNote	The ID of the footnote.
Note	The text of the footnote.

3.8. "Units" reference table.

This table lists the unit codes used. The unit codes are now the Eurobase codes. They are no longer year dependent. The table structure is as follows:

Field	Explanation
IdUnit	The ID of the unit.
EuUnit	The unit code. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuUnitCaption	A descriptive text that explains what the unit code means.

3.9. "Variables" reference table.

This table lists the variable codes used. The variable codes are now the Eurobase codes. They are no longer year dependent. The table structure is as follows:

Field	Explanation
IdVariable	The ID of the variable.
EuVariable	The variable code. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuVariableCaption	A descriptive text that explains what the variable is about.

3.10. "Recent Updates" reference table.

This table lists when the database was last updated. The table structure is as follows:

Field	Explanation
Year	That is the year the survey was carried on.
IdCountry	The ID declaring country. The details of the country can be found in the Countries table.
LastUpdated	When Eurostat last updated the data for that reference year and declaring country.

This table could not be produced with the corporate software. Hence, it does not contain any data for 2017 or later.

4. QUERIES

4.1. "View DataWithAggregates" query

This view is identical to the DataWithAggregates table, but the IDs have been replaced by the codes from the respective reference tables. The view has the following structure:

Field	Explanation
IdYear	That is the year the survey was carried on.
EuCountry	The declaring country. See list of codes in table Countries . The Eu prefix has been added as a reminder that it is a Eurobase code.
EuVariable	The variable, see list of codes in table Variables . The Eu prefix has been added as a reminder that it is a Eurobase code.
EuBrkDwn	The breakdown, see list of codes in table BrkDwns . The Eu prefix has been added as a reminder that it is a Eurobase code.
EuUnit	The unit the value is expressed on. See list of codes in the Units table. . The Eu prefix has been added as a reminder that it is a Eurobase code.
Value	The value, rounded to 4 decimals.
Flags	The flags attached to the value. Flags codes are defined below.
Note	The footnote attached to the value.

The flags code used are defined as follows:

Flag	Meaning
a	This value is an aggregate computed by Eurostat
c	This value is confidential. It is therefore not published and has not been used to compute the EU aggregates.
m	This value is under embargo. It is therefore not published but has been used to compute the EU aggregates.
u	This value is unreliable. It is therefore not published but has been used to compute the EU aggregates.
x	This value does not come from the Eurostat surveys, but rather from an external source, (e.g. OECD).

From 2017 onwards, only the c and u flags are used.

4.2. "View NotesWithAggregates" query

On top of footnotes that apply to only one cell, there are footnotes that apply to a variable, to a breakdown or to a whole questionnaire. This view is identical to the NotesWithAggregates table, but the IDs have been replaced by the codes from the respective reference tables. The view has the following structure:

Field	Explanation
IdYear	That is the year the survey was carried on.
EuCountry	The declaring country. See list of codes in table Countries . The Eu prefix has been added as a reminder that it is a Eurobase code.
EuVariable	The variable the footnote applies to, see list of codes in table Variables . An asterisk (*) means the footnote applies to all variables. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuBrkDwn	The breakdown the footnote applies to, see list of codes in table BrkDwns . An asterisk (*) means the footnote applies to all breakdowns. The Eu prefix has been added as a reminder that it is a Eurobase code.
Note	The text of the footnote. For the EU aggregates, the footnote is a catenation of the original footnote, prefixed with the country code. For example, if a footnote applies to some German data, the corresponding EU data will have the same footnote, prefixed with "DE:".

4.3. "View AggregContents" query

Eurostat computes EU aggregated data, when at least 55% of the countries representing 60% of the population have reported data. That means the user must have a way to know with countries have been used to compute the EU aggregates. That is the purpose of the "View AggregContents" query. This view is identical to the AggregContents table, but the IDs have been replaced by the codes from the respective reference tables. Its structure is as follows:

Field	Explanation
IdYear	That is the year the survey was carried on.
EuCountry	The declaring country. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuVariable	The variable code. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuBrkDwn	The breakdown code. The Eu prefix has been added as a reminder that it is a Eurobase code.
EuUnit	The unit code. The Eu prefix has been added as a reminder that it is a Eurobase code.
Included	The list of the countries which have been used in the computation. If the aggregate could not be computed because of insufficient data, then the percentage of the countries and of the population are indicated instead.

4.4. "View RecentUpdates" query.

This view lists when the database was last updated. It is identical to the RecentUpdates table, but the country IDs have been replaced by the codes from the Countries table. The view structure is as follows:

Field	Explanation
IdYear	That is the year the survey was carried on.
EuCountry	The declaring country. The Eu prefix has been added as a reminder that it is a Eurobase code.
LastUpdated	When Eurostat last updated the data for that reference year and declaring country.

This table could not be produced with the corporate software. Hence, it does not contain any data for 2017 or later.

5. ADDITIONAL QUERIES

Additional queries can easily be built to accommodate specific needs. At present, we have built such queries only for the household survey. They are included for your convenience.

More of those convenience queries may be added in the future.

Now we have such queries for both surveys.