



# ICT Surveys database on Enterprises

Quick documentation (updated 13/12/2023)

## 1. UPDATE

As of 2022 the data collection uses SDMX format. The main consequence on this database is the split of the Brkdwn dimension into 4 new dimensions: Enterprise size, NACE Rev. 2 activity, region and custom breakdown. Therefore this documentation has been reviewed to fit the new database structure.

## 2. DATABASES

### 2.1. Databases - Files

The database is in one file, SDMXE.mdb, with the data from the ICT surveys on enterprises, NACE Rev. 2.

### 2.2. 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 <b>Countries</b>
IdIndicator	The ID of the indicator, see list of codes in table <b>Indicators</b>
IdEntSize	The ID of the enterprise size, see list of codes in table <b>EntSizes</b>
IdActivity	The ID of the NACE Rev. 2 activity, see list of codes in table <b>Activity</b>
IdRegion	The ID of the NUTS region, see list of codes in table <b>Regions</b>
IdCustBrkDwn	The ID of the custom breakdown, see list of codes in table <b>CustBrkDwns</b>
IdUnit	The Id of the unit the value is expressed on. See list of codes in the <b>Units</b> 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 <b>Notes</b> table.

The flags code used are defined as follows:

Flag	Meaning
a	This value is an aggregate computed by Eurostat
b	This value has a break in series. It is not comparable to the same value, for the previous period.
c	This value is confidential. It is therefore not published and has not 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.

### 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 <b>Countries</b>
IdIndicator	The ID of the indicator the footnote applies to, see list of codes in table <b>Indicators</b> . An asterisk (*) means the footnote applies to all indicators.
IdEntSize	The ID of the enterprise size the footnote applies to, see list of codes in table <b>EntSizes</b> . An asterisk (*) means the footnote applies to all enterprise sizes.
IdActivity	The ID of the NACE Rev. 2 activity the footnote applies to, see list of codes in table <b>Activities</b> . An asterisk (*) means the footnote applies to all NACE Rev. 2 activities.
IdRegion	The ID of the NUTS region the footnote applies to, see list of codes in table <b>Regions</b> . An asterisk (*) means the footnote applies to all NUTS regions.
IdCustBrkDwn	The ID of the custom breakdown the footnote applies to, see list of codes in table <b>CustBrkDwns</b> . An asterisk (*) means the footnote applies to all custom 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.
IdIndicator	The indicator code.
IdEntSize	The enterprise size code.
IdActivity	The NACE Rev. 2 activity code.
IdRegion	The NUTS region code.
IdCustBrkDwn	The custom 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 <b>Included</b> 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. "Activities" reference table

This table lists the NACE Rev. 2 activity codes used.  
The table structure is as follows:

Field	Explanation
IdActivity	The NACE Rev. 2 activity.
ExpActivity	The NACE Rev. 2 activity code. The Exp prefix has been added as a reminder that it is a Eurobase code.
IdActivityGroup	The group name the activity belongs to. That information is given to allow the easy grouping of the activities that relate together

ExpActivityCaption	A descriptive text on the NACE Rev. 2 activity.
--------------------	---

### 3.5. "Countries" reference table

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

Field	Explanation
IdCountry	The country ID.
ExpCountry	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.
ExpCountryCaption	A descriptive text that explains what the country code means.

### 3.6. "CustBrkDwns" reference table

This table lists the custom breakdown codes used. The custom breakdown codes are the same as the indicator codes. They are no longer used after 2013.

The table structure is as follows:

Field	Explanation
IdCustBrkDwn	The custom breakdown ID.
ExpCustBrkDwn	The custome breakdown code. The Exp prefix has been added as a reminder that it is a Eurobase code.
IdCustBrkDwnGroup	The group name the custom breakdown belongs to. This field is always empty, as custom breakdown grouping is not used.
ExpCustBRkDwnCaption	A descriptive text on the custom breakdown.

### 3.7. "EntSizes" 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
IdEntSize	The enterprise size ID.
ExpEntSize	The enterprise size code. The Exp prefix has been added as a reminder that it is a Eurobase code.
IdEntSizeGroup	The group the enterprise size belongs to. That information is given to allow the easy grouping of the enterprise sizes that relate together
ExpEntSizeCaption	A descriptive text on the enterprise size.

### 3.8. "Included" reference table

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

Field	Explanation
IdYear	The year the "Included" text refers to.
IdIncluded	The ID of the countries included text.
Included	The text which specifies which countries are included in a country aggregate.

### 3.9. "Indicators" reference table

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

Field	Explanation
IdIndicator	The ID of the indicator.
ExpIndicator	The indicator code. The Exp prefix has been added as a reminder that it is a Eurobase code.
IdIndicatorGroup	The group the indicator belongs to. That information is given to allow the easy grouping of the indicators that relate together.
ExpIndicatorCaption	A descriptive text that explains what the indicator is about.

### 3.10. "Notes" reference table

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

Field	Explanation
IdYear	That is the year the note refers to.
IdNote	The ID of the footnote.
Note	The text of the footnote.

### 3.11. "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.

### 3.12. "Regions" reference table

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

Field	Explanation
IdRegion	The ID of the NUTS region.
ExpRegion	The NUTS region code. The Exp prefix has been added as a reminder that it is a Eurobase code.
IdRegionGroup	The group the NUTS region belongs to. This field is always empty, as NUTS region grouping is not used.
ExpRegionCaption	A descriptive text that explains what the NUTS region is about.

### 3.13. "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.
ExpUnit	The unit code. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpUnitCaption	A descriptive text that explains what the unit code means.

## 4. QUERIES

### 4.1. "1\_View AllData" 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
ExpPeriod	That is the year the survey was carried on.
ExpCountry	The declaring country. See list of codes in table <b>Countries</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpIndicator	The indicator, see list of codes in table <b>Indicators</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpEntSize	The enterprise size, see list of codes in table <b>EntSizes</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpActivity	The NACE Rev. 2 activity, see list of codes in table <b>Activities</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpRegion	The NUTS region, see list of codes in table <b>Regions</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpCustBrkDwn	The custom breakdown, see list of codes in table <b>CustBrkDwns</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.



Field	Explanation
ExpUnit	The unit the value is expressed on. See list of codes in the <b>Units</b> table. . The Exp 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
b	Break in series. The value is not comparable to the corresponding value from the previous period.
c	This value is confidential. It is therefore not published and has not 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.

#### 4.2. "View NotesWithAggregates until 2016" query

On top of footnotes that apply to only one cell, there are footnotes that apply to a indicator, to an enterprise size, to a NACE Rev. 2 activity, to a region, to a custom 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
ExpPeriod	That is the year the survey was carried on.
ExpCountry	The declaring country. See list of codes in table <b>Countries</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpIndicator	The indicator the footnote applies to, see list of codes in table <b>Indicators</b> . An asterisk (*) means the footnote applies to all indicators. The Exp prefix has been added as a reminder that it is a Eurobase code.

Field	Explanation
ExpEntSize	The enterprise size the footnote applies to, see list of codes in table <b>EntSizes</b> . An asterisk (*) means the footnote applies to all enterprise sizes. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpActivity	The NACE Rev. 2 activity the footnote applies to, see list of codes in table <b>Activities</b> . An asterisk (*) means the footnote applies to all NACE Rev. 2 activities. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpRegion	The NUTS region the footnote applies to, see list of codes in table <b>Regions</b> . An asterisk (*) means the footnote applies to all NUTS regions. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpCustBrkDwn	The custom breakdown the footnote applies to, see list of codes in table <b>CustBrkDwns</b> . An asterisk (*) means the footnote applies to all custom breakdowns. The Exp 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:".

These dimension notes were no longer used after 2016. This is reflected in the view name.

#### 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
ExpPeriod	That is the year the survey was carried on.
ExpCountry	The declaring country. See list of codes in table <b>Countries</b> . The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpIndicator	The indicator the footnote applies to, see list of codes in table <b>Indicators</b> . An asterisk (*) means the footnote applies to all indicators. The Exp prefix has been added as a reminder that it is a Eurobase code.

Field	Explanation
ExpEntSize	The enterprise size the footnote applies to, see list of codes in table <b>EntSizes</b> . An asterisk (*) means the footnote applies to all enterprise sizes. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpActivity	The NACE Rev. 2 activity the footnote applies to, see list of codes in table <b>Activities</b> . An asterisk (*) means the footnote applies to all NACE Rev. 2 activities. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpRegion	The NUTS region the footnote applies to, see list of codes in table <b>Regions</b> . An asterisk (*) means the footnote applies to all NUTS regions. The Exp prefix has been added as a reminder that it is a Eurobase code.
ExpCustBrkDwn	The custom breakdown the footnote applies to, see list of codes in table <b>CustBrkDwns</b> . An asterisk (*) means the footnote applies to all custom breakdowns. The Exp 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. If the value for a specific country is flagged, the flag is reproduced after the country code.

#### 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
Year	That is the year the survey was carried on.
ExpCountry	The declaring country. The Exp 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.

## 5. ADDITIONAL QUERIES

Additional queries can easily be built to accommodate specific needs. They are included for your convenience.

We provide, as example, two kind of queries:

- Queries that reproduce the data from parts of the questionnaire,
- The Eurobase queries.