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SHORT-TERM BUSINESS STATISTICS

Luxembourg, 26th October 2005

Base year and weighting system

1. Base year

Eurostat plans to implement the base year 2005 combined with the first delivery of data according to the new NACE classification. This timetable stays in line with the Council Regulation (Article 11) and corresponds to the delivery in 2009 onwards of STS data in the new NACE classification.

1.1. Base year at the time of the change to NACE Rev. 2

The Council Regulation mentions the need to change every 5 years the base year for all the indices, 3 years after the end of years finishing by 0 and 5. Eurostat would propose to keep this rule as it is also a rule used at an international level and for many statistical domains.

To apply the Council Regulation leads to implement base year 2005 at the end of 2008, beginning of 2009. This date coincides with the implementation of the NACE Rev 2. in the field of STS, asked in the NACE Regulation draft for data corresponding to January 2009 or first quarter 2009. Therefore Eurostat proposes to implement the 2005 base year at the same time of the introduction of the NACE Rev 2. for STS indicators, that means beginning of 2009. The weights for 2005 in NACE Rev 2. should be based on estimation from 2005 SBS data in NACE Rev 1.1 from countries, as the 2005 SBS data will be the latest **reliable** data available.

The Working group is asked to agree with these proposals.

1.2. Future rebasing

The next change for base year 2010 should occur in 2013.

The Council Regulation offers the possibility for Member States to adapt the weighting system when necessary. When final data for 2008 SBS will be available, it could turn out that the estimation for the 2005 base year weights could be shown to have been wrong in some cases. Then Eurostat would be ready to accept revisions to the weights provided by countries.

The Working Group is asked to comment.

2. The weighting system

2.1. Problem statement

Countries need weights of different industries to combine sub-indices into the aggregated levels. Eurostat needs weights to combine countries' data into European aggregates. Therefore to apply a base year change, Eurostat needs a full matrix of weights with three dimensions: country, weighting variable and classification level (NACE or Migs). The matrix of weights has to be available before the first delivery in the new base year.

Each STS indicator is linked to a weighting scheme for calculation and dissemination of the European aggregates. The weighting system refers to 5 SBS variables, to 2 non-domestic variables:

- (1) Value-added V12150 (the number refers to the SBS Regulation);
- (2) Turnover V12110;
- (3) Number of persons employed V16110;
- (4) Hours worked V16150;
- (5) Wages V13320;
- (6) Non domestic turnover for Eurozone;
- (7) non-domestic turnover for Non-Eurozone.

The 7 variables mentioned above will be available for the base year 2005 according to NACE Rev 1.1 in 2008. Eurostat needs these figures in NACE Rev 2.. There are two main approaches to convert the NACE Rev 1.1 matrix into a NACE Rev 2. matrix: a micro approach or a macro approach or mix.

2.2. Micro and macro approaches

In the micro approach the objective is to assign with each sampled unit a code in the new classification and to estimate then the aggregates. For simple bond (one to one) between NACE Rev 1.1 and NACE Rev 2. An automatic reclassification can be carried out. For multiple bonds, a manual reclassification is the best way but difficult to implement due to time constraints and budget. The advantage of this method is the level of precision whereas the disadvantage is the cost.

In the macro approach, the units do not need to be reclassified individually. Coefficients of conversion can be calculated, using also data for which the double classification is known. The major advantage is that there are fewer treatments to be done at an aggregated level. The disadvantage raises from the introduction of errors in the estimation of the conversion coefficients.

2.3. Elaboration of weights base year 2005 in NACE Rev 2.

The process to elaborate the weighting system for the needed variables has been by the past the following:

- step1: Eurostat selected the variables for the base year from the SBS data; SBS data is considered reliable; no checks are done; the set of weights are elaborated for each

country; it may happen that some activities are not covered already in the SBS data. Then Member States would have to provide weights in step3.

- step 2: Eurostat sent the set of weights to the Member States for verification and approval, making sure that the proposed weights are consistent at a high level of aggregation;

- step 3: Back from the Member States, the set of weights was applied for the European calculations.

For the next base year change, a new dimension has to be considered: the classification change (differences in bold).

Steps	Previous base year XX change	Base year 2005 change in NACE Rev 2.
1: selection of SBS variables per country	Based on NACE rev 1.1	Idem
2: sent to MS for validation	Valid	Valid but
2 bis : conversion to NACE Rev 2.	Not applicable	Need to be converted in NACE Rev 2.
3: back from MS, to be applied for STS domain	In NACE Rev 1.1	In NACE Rev 2.

For their own national purposes, countries have to make the conversion to NACE Rev 2. Of course they also have the best knowledge of their national circumstances, economic structures and available data, compared to Eurostat. Member States may use one the approaches described before (micro, macro) or even both of them. Eurostat will provide help to Member States to elaborate this step 2 bis by producing correspondance tables for the NACE (already available) and CPA (to come) classifications.

The working group is asked whether they think further help will be needed and, if yes, what form this help should take.

3. Timetable

October 2005: agreement on the base year to be implemented with the classification change

2006: to settle the schedule for the cooperation between Eurostat and countries concerning the implementation of the weighting system in NACE Rev 2.

March 2008: Final SBS data for the reference year 2005 available in NACE Rev 1.1.

Eurostat sends the set of weights to Member States.

September 2008: Final deadline for provision of the set of final weights by Member States to Eurostat according to NACE Rev 2.

Sept-Dec 2008: Check by Eurostat. Bilateral contacts if needed.

2009 Q1: implementation of 2005 weights in NACE Rev 2. for STS indicators.

The working group is asked to approve this timetable.

4. ANNEX: PERFECT MATCHES BETWEEN NACE REV 1.1 AND NACE REV. 2

Section NACE Rev2.	Number of classes (or groups or divisions)	Nb perfect matches	% perfect matches in NACE REV2 classes
A	39	4	10%
B	15	1	7%
C	231	114	49%
D	8	3	37%
E	9	2	22%
F	23	7	30%
G	91	53	58%
H	23	9	39%
I	8	5	62%
J	26	3	12%
K	18	7	39%
L	4	3	75%
M	18	5	28%
N	33	7	21%
O	9	6	67%
P	11	2	18%
Q	12	1	8%
R	16	4	25%
S	19	10	53%
T	3	3	100%
U	1	1	100%
Total	617	250	41%