**Air emissions accounts (AEA)**

**Quality report for September 2018 data transmission**

Country Czech Republic Date 30. 9. 2018

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*Please fill in this template and return it to Eurostat by **30 September 2018** together with the completed 2016 AEA questionnaire. Both files should be sent using eDAMIS. Please ensure that the following information is entered in eDAMIS:*

*Domain name: ENVPFLAC*
*Data set name: ENVPFLAC_AEA_A*
*End of the (mandatory) reference period: 2016*

*Please write in English. Please limit the length of your report to six pages.*

***Under each point please focus on changes compared to the last year's quality report (e.g. changes in methodology, data availability, new IPCC inventory guidelines for GHG inventory, etc.).***

**Relevance**

The European Parliament and Council decided air emission accounts shall be provided, through Regulation (EU) No 691/2011 on European environmental accounts.

Air emissions accounts present emissions of 14 different gases originating from 64 industries and from households. Linked to input-output tables, they provide a powerful analytical tool.

These EU accounts are consistent with the System of Environmental-Economic Accounting – Central Framework adopted by the United Nations Statistical Commission as a world-level statistical standard in March 2012.

*Who are the main users of air emissions accounts data at national level? In your country, how much policy need is there for AEA data?*

**Timeliness and punctuality**

The Regulation requires air emissions accounts to be provided by 30 September every year.

*Czech Republic* transmitted the data to Eurostat on *1.10.2018,* covering the years *2012 – 2016.*

*The data was prepared before transmission.*

**Accessibility and clarity**

Data will be made available on Eurostat's web site as soon as possible after checking.

*Please add whether and when you publish AEA data nationally - if so where and if not why not.*

**Accuracy, comparability and coherence**

Approach used to compile air emissions accounts:

☐ *inventory-first* ☐ *energy-first* ☑ *other (please specify):*

Both methodology (depending of pollutants).

Please provide a description of the methods you use in compiling AEA, in particular:

1) Describe the sources of data such as emissions inventories and basic data on energy, transport, agriculture, etc.

Czech emission inventory of Air pollutions emissions is performed in accordance with the national legislation for the prevention of air polluting and reduction of air pollution from 2012. There are Act 201/2012 Coll., on the air protection (Air Protection Act), and Regulation 415 /2012 Coll., on the permitted level of pollution and its ascertainment and on the implementation of some further provisions of the Act on the protection of air.

The information is stored in the Register of Emissions and Air Pollution Sources (REZZO), which is maintained by the Ministry of the Environment of the Czech Republic. This emission database, which is used for archiving and presenting data on stationary and mobile sources of air pollution, is, pursuant to the valid legislation (Section 7 of Air Protection Act), is part of the Air quality information system (ISKO) operated by Czech Hydrometeorological Institute (CHMI).

Air pollution sources are divided to the individually monitored sources (REZZO 1 and 2) and sources monitored as area sources (REZZO 3 and 4). The emission inventory of air pollution sources, prepared for the purposes of international reporting, is based on a combined methodology. In addition to the reporting of primary emission data from operators of sources, other operating information is also used to estimate emissions of GHG (fuel consumption data). A significant part of emissions (area sources) is also estimated on the basis of statistically monitored and reported information and available emission factors.

The stationary air pollution sources monitored collectively are registered in REZZO 3. They include emission from local household heating, fugitive TSP emissions from construction and agricultural activity, ammonia emissions from the breeding of farm animals, the application of mineral nitrogenous fertilizers and VOC emissions from the use of organic solvents. With the exception of emission from household heating, other groups of sources are calculated solely using data obtained within the national statistical monitoring. The calculation of

emissions from local household heating is based mainly on the results of the population and housing CENSUS.

The emission balance from mobile sources (REZZO 4) had been complied by Transport Research Centre (CDV) based on data on the sale of fuels submitted CSO, and own emission factors. Emission data on mobile sources in agriculture and forestry are processed by Research Institute of Agricultural Engineering (VÚZT).

Main principles of the emission inventory:

- the use of reported emission data (national database REZZO) or e.g. by selected emissions (GHG) the use of reported energy data for the calculation of emissions from stationary sources

- the use of data reported in the GHG inventory for sources other than energy stationary sources

- the use of ad.hoc. research studies prepared for the national emission inventory

For the division of emissions into NACE classes the following principles were used:

- direct identification of emissions according to the main aktivity of an operator of stationary sources (emissions according to the CLRTAP and energy GHG emissions)

- identification of specific emissions using the CRF categories (GHG emissions from technological sources, F-gases

- identification using statistical data (e.g. transport, agriculture, use of solvents, animal farming)

2) How are the source data allocated to economic activities (NACE A*64)?

Industrial sources for UNECE/EMEP inventory are monitored as “point sources”, except small part of Solvent Use category. The NACE code for sources monitored as point sources (directly reported emissions and fuel consumption) is allocated according to the data registered in CzSO (Czech Statistical Office). The specific categories, e.g. Coal mining, Construction, Agricultural operations and Product use (especially F-gases) are directly allocated.

3) How do you determine and distribute road transport emissions by NACE*64?

The estimate of 80 % household share in total passenger car emission based on VAT data was replaced by data based on ENERGO 2015 census done by CZSO at sample of 14 thousands households. Annual millage and prevailing fuel estimates had been performed. The results

had brought new estimate of household share in emission of 60 % (for whole time series since 2012).

4) How do you adjust for the residence principle (i.e. for **residents abroad** adding emissions from land transport, water transport and air transport. For **non-residents on the territory** deducting emissions from land transport, water transport and air transport.)?

The emissions for residents abroad were deducted from national emissions. The emission calculations were based on fuel consumption of residents abroad and corresponding emission factors. According to data provided by the Czech Statistical Office the vehicles millage was estimated and the average fuel consumption was used. The emissions for non-residents on the territory were added to national emissions. Data on vehicle millage driven by non-residents in the CR were provided by the Czech Statistical Office, by the Ministry of Transport and the Ministry of Finance.

5) Do you recalculate data for years before 2008 in NACE Rev 2? If so, for which years and how?

No, the data for years before 2008 are not available.

6) Are there other discontinuities in time series resulting from changes in methodology, sources, etc. (please describe and indicate the years where the breaks occur)?

……

7) What problems do you encounter adapting basic statistics to the concepts of the accounts?

☐ *adjustments for the residence principle*

Please specify the main difficulties:…….

☐ *attributing emissions to the requested detailed level of economic activities (NACE A* 64) (in particular services industries)*

Please specify the main difficulties:…….

☐ *allocation of road transport emissions to NACE*

Please specify the main difficulties:…….

☐ *correspondence between emission sources in inventories (classified according to CRF/ NFR) and the detailed industry classification (NACE A*64)*

Please specify the main difficulties:…….

☑ *other (please specify):* *harmonization of fuel consumption data from REZZO with energy balance*

8) Are there any particular parts of the AEA data which you would consider of doubtful quality?

……

9) Other assessments and quality reports:

- Do you have national descriptions of the methodology you use? If so please provide them.

Detailed methodology for GHG emissions is explained in the official reported documents under UNFCCC:

https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/national-inventory-submissions-2018

Detailed methodology for pollutants is explained in the official reported documents under CLRTAP:

http://www.ceip.at/ms/ceip_home1/ceip_home/status_reporting/2017_submissions/ IIR of the Czech Republic.

- Do you have national quality reports available? If so please provide them.

Official quality reports of the GHG inventory are available on the request by the coordinator of the inventory. Detailed explanation of the QA/QC procedures is included in the official reporting, chapter 1.2:

https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/national-inventory-submissions-2018

Quality reports of the CLRTAP inventory is part of IIR document.