

## Single Integrated Metadata Structure (SIMS)

**Country:** Greece

**Compiling agency:** ELSTAT

**Domain name:** Air Emissions Accounts - NAMEA

### ELSTAT metadata

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1. Contact		<a href="#">Top</a>
1.1	Organization	HELLENIC STATISTICAL AUTHORITY (ELSTAT)
1.2	Contact organization unit	SECONDARY SECTOR STATISTICS DIVISION (G3) Construction and Environment Statistics Section (G32)
1.3	Contact name	Vlachos Panagiotis
1.4	Contact person function	Compilation of statistics on air emissions- NAMEA
1.5	Contact mail address	Peiraios 46 & Eponiton, 185 10 Piraeus
1.6	Contact e-mail address	p.vlachos@statistics.gr
1.7	Contact phone number	+30 213 1353102

<b>1.8</b>	<b>Contact fax number</b>	+30 213 1352453
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<b>2. Introduction</b>	<b><a href="#">Top</a></b>
<p>The estimation of air emissions is the first step in order to prevent climate change, which is one of the top priorities of the European Union. ELSTAT, fully responding to this obligation, compiles the National Accounts Matrix Environmental Accounts –Air (NAMEA) in accordance with the methodological principles set out by Eurostat.</p>	

<b>3. Metadata Update</b>	<b><a href="#">Top</a></b>
<b>3.1 Metada last certified</b>	October 2014
<b>3.2 Metadata last posted</b>	October 2014
<b>3.3 Metadata last updated</b>	October 2014

<b>4. Statistical Presentation</b>	<b><a href="#">Top</a></b>
<b>4.1 Data description</b>	
<p>The National Accounts Matrix Environmental Accounts –Air (NAMEA) is compiled pursuant to Regulation (EU) No 691/2011 of the European Parliament and of the Council on European environmental economic accounts.</p> <p>Air emissions accounts record and present data on air emissions in a way that is compatible with the system of national accounts. Air emissions refer to every branch of economic activity, which includes activities pertaining to production, intermediate consumption or final consumption.</p> <p>The main data source is the annual report on climate change air emissions compiled by the Ministry of Environment and Climate Change (YPEKA) under the title “Annual Inventory Submission under the Convention and the Kyoto Protocol for Greenhouse and other gases for the years 1990-2012”.</p> <p>This inventory is compiled by a group of experts on air pollution which has been set up in YPEKA and consists of specialized officials of the National Technical University of Athens NTUA – School of Chemical Engineering (inventory team). The Section of Construction and Environment Statistics of ELSTAT has a very close cooperation with this team.</p> <p>These data are transmitted to the UNFCCC and CLRTAP and are the official data of Greece on air emissions.</p> <p>Air emissions are allocated to the individual sectors of economic activities on the basis of NACE Rev.2 of NAMEA tables. This allocation is usually as follows:</p> <ul style="list-style-type: none"> <li>A) At a first stage, in the Inventory of YPEKA the largest share of air emissions is already allocated to the individual sectors of the economy. In addition the Division of Secondary Statistics of ELSTAT has already a close and fruitful cooperation with the NTUA-School of Chemical Engineering which transmits to ELSTAT more detailed data.</li> <li>B) After the allocation of all these main estimates to the sectors, there is still a remaining amount of air emissions which mostly pertain to the services sector. These remaining air emissions are duly allocated on the basis of appropriate indices. The indices are compiled on the basis of National Accounts data, such as Value Added by sector, employment data, fuel consumption, etc.</li> <li>C) As regards imports of air emissions generated abroad and exports of air emissions generated by the activities of domestic units to other countries, the “residence principle” is implemented. The corresponding data that are used for the compilation of the relevant indices are the data on foreign currency on fuels, which are provided by the Bank of Greece.</li> </ul>	
<b>4.2 Classification system</b>	

The classification system used in compliance with Regulation (EU) No 691/2011 on European environmental economic accounts is NACE Rev2.
<b>4.3 Sector coverage</b>
The NAMEA tables which are compiled cover all the sectors of the economy pertaining to production, intermediate consumption, as well as final consumption of all the institutional units of the economy.
<b>4.4 Statistical concepts and definitions</b>
The concepts and definitions of the relevant variables are fully in line with the corresponding concepts laid down by Regulation (EU) No 691/2011 on European environmental economic accounts.
<b>4.5 Statistical unit</b>
The data derive from YPEKA and are the result of the surveys conducted by the inventory team of the School of Chemical Engineering of the NTUA. This specific study covers all the institutional units of the economy, as well as the activities referring to air pollution.
<b>4.6 Statistical population</b>
All air emissions within the scope of the Regulation (EU) No 691/2011.
<b>4.7 Reference area</b>
Data on air emissions of the NAMEA tables refer to Greece total.
<b>4.8 Time coverage</b>
1995-2009 NACE Rev.1 2008-2012 NACE Rev.2
<b>4.9 Base period</b>
Not applicable.

<b>5. Unit of measure</b>	<b><a href="#">Top</a></b>
<p>Due to the nature of air emissions, the units of measure are as follows:</p> <ul style="list-style-type: none"> <li>• CO<sub>2</sub> is measured in 1000 tonnes (Gg)</li> <li>• N<sub>2</sub>O and CH<sub>4</sub> are measured in tonnes (Mg)</li> <li>• PFCs, HFCs, SF<sub>6</sub> and NO<sub>x</sub> are measured in Mt CO<sub>2</sub> eq.</li> <li>• NMVOCs, CO, PM<sub>10</sub> and PM<sub>2,5</sub> particles, SO<sub>2</sub> and NH<sub>3</sub> are measured in tonnes (Mg)</li> </ul>	

<b>6. Reference period</b>	<b><a href="#">Top</a></b>
One calendar year, with first reference year for the revised NAMEA the year 2008 (NACE Rev.2)	

<b>7. Institutional mandate</b>	<b><a href="#">Top</a></b>
<b>7.1 Legal acts and other agreements</b>	
<p>The legal framework concerning the organization and operation of ELSTAT is as follows:</p> <p>Law 3832/2010 (Government Gazette No 38, Issue A): "<i>Hellenic Statistical System Establishment of the Hellenic Statistical Authority (ELSTAT) as an Independent Authority</i>", as amended by article 90 paragraphs 8 and 9 of the Law 3842/2010 (Government Gazette No 58, Issue A): "<i>Restoration of fiscal justice, confrontation of tax evasion and other provisions</i>", by article 10 of the Law 3899/2010 (Government</p>	

Gazette No 212, Issue A): *"Urgent measures for the implementation of the assistance program of the Greek Economy"*, by article 45 of the Law 3943/2011 (Government Gazette No 66, Issue A): *"Combating tax evasion, staffing of auditing services and other provisions falling within the competence of the Ministry of Finance"*, by article 22 paragraph 1 of the Law 3965/2011 (Government Gazette No 113, Issue A): *"Operations Reform of the Consignment and Loan Fund, Public Debt Management Agency, Public Enterprises and Government bodies, the establishment of the General Secretary of Public Property and other provisions"*, by article first of the Law 4047/2012 (Government Gazette No 31, Issue A): *"Ratification of the Act of Legislative Content 'Very urgent measures for the implementation of the Medium-term Fiscal Strategy 2012-2015 and of the State Budget for 2011' and of the Act of Legislative Content 'Regulation of very urgent issues for the implementation of law 4024/2011 'Pension provisions, uniform pay scale - grading system, labour reserve and other provisions for the implementation of the Medium-term Fiscal Strategy Framework 2012-2015' and of issues falling within the competence of the Ministries of Administrative Reform and E-Governance, Interior, Finance, Environment, Energy and Climate Change, and of Education, Lifelong Learning and Religious Affairs and related to the implementation of the Medium-term Fiscal Strategy Framework 2012-2015' and other provisions"*, by article 323 of the Law 4072/2012 (Government Gazette No 86, Issue A): *"Improvement of the business environment New corporate form - Trade Marks - Realtors - Regulating maritime, port and fishing matters and other provisions"* and by article 7 paragraph 1 of the Act of Legislative Content dated 18/11/2012 (Government Gazette No 228, Issue A): *"Financial rules and other provisions"*, by Article 93 of the Law 4182/2013 (Government Gazette No 185, Issue A): *"Code of charitable estate, inheritances in abeyance and other provisions"*, by Article 6 paragraph 8 of the Law 4244/2014 (Government Gazette 60, Issue A): *"Integration in Greek law of the Council Directive 2013/1/EU of 20 December 2012 amending Directive 93/109/EC as regards certain detailed arrangements for the exercise of the right to vote and stand as a candidate in elections to the European Parliament for citizens of the Union residing in a Member State of which they are not nationals and amendment of law 2196/1994 (A' 41) and other provisions"*, by Article first subparagraph C.3 of the Law 4254/2014 (Government Gazette No 85, Issue A): *"Measures for the support and development of the Greek economy, in the context of the implementation of Law 4046/2012, and other provisions of law"* and by Article 33, paragraphs 5a and 5b of the Law 4258/2014 (Government Gazette No 94, Issue A): *"Demarcation process and arrangements of matters for streams - arrangements of Urban Planning legislation and other provisions"*.

Regulation on the Operation and Administration of the Hellenic Statistical Authority (ELSTAT), 2012, (Government Gazette No 2390, Issue B, 28-8-2012)

Regulation (EC) No 223/2009 of the European Parliament and of the Council, on the European statistics (Official Journal of the European Union L 87/164).

Article 14 of the Law 3470/2006 (Government Gazette No 132, Issue A): *"National Export Council, tax regulations and other provisions"*.

Article 3, paragraph 1c, of the Law 3448/2006 (Government Gazette No 57, Issue A): *"For the further use of information coming from the public sector and the settlement of matters falling within the responsibility of the Ministry of Interior, Public Administration and Decentralization"*.

European Statistics Code of Practice, adopted by the Statistical Programme Committee on 24 February 2005 and promulgated in the Commission Recommendation of 25 May 2005 on the independence, integrity and accountability of the national and Community statistical Authorities, after its revision, which was adopted on 28 September 2011 by the European Statistical System Committee.

Presidential Decree 226/2000 (Government Gazette No 195, Issue A): *"Organization of the General Secretariat of the National Statistical Service of Greece"*.

Articles 4, 12, 13, 14, 15 and 16 of the Law 2392/1996 (Government Gazette No 60, Issue A): *"Access of the General Secretariat of the National Statistical Service of Greece to administrative sources and administrative files, Statistical Confidentiality Committee, settlement of matters concerning the conduct of censuses and statistical works, as well as of matters of the General Secretariat of the National Statistical Service of Greece"*.

Moreover, Regulation (EU) No 691/2011 of the European Parliament and of the Council on European environmental economic accounts.

## 7.2 Data sharing

No.

## 8. Confidentiality

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### 8.1 Confidentiality policy

The issues concerning the observance of statistical confidentiality by the Hellenic Statistical Authority (ELSTAT) are arranged by articles 7, 8 and 9 of the Law 3832/2010 as in force, by Articles 8, 10 and 11(2) of the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System and by Articles 10 and 15 of the Regulation on the Operation and Administration of ELSTAT.

Furthermore, ELSTAT disseminates the statistics in compliance with the statistical principles of the European Statistics Code of Practice and in particular with the principle of statistical confidentiality.

### 8.2 Confidentiality – data treatment

ELSTAT protects and does not disseminate data it has obtained or it has access to, which enable the direct or indirect identification of the statistical units that have provided them by the disclosure of individual information directly received for statistical purposes or indirectly supplied from administrative or other sources. ELSTAT takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. Statistical data that could potentially enable the identification of the statistical unit are disseminated by ELSTAT if and only if:

- a) these data have been treated, as it is specifically set out in the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System (ELSS), in such a way that their dissemination does not prejudice statistical confidentiality or
- b) the statistical unit has given its consent, without any reservations, for the disclosure of data.

The confidential data that are transmitted by ELSS agencies to ELSTAT are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task and appointed by an act of the President of ELSTAT.

ELSTAT may grant researchers conducting statistical analyses for scientific purposes access to data that enable the indirect identification of the statistical units concerned. The access is granted provided the following conditions are satisfied:

- a) an appropriate request together with a detailed research proposal in conformity with current scientific standards have been submitted;
- b) the research proposal indicates in sufficient detail the set of data to be accessed, the methods of analyzing them, and the time needed for the research;
- c) a contract specifying the conditions for access, the obligations of the researchers, the measures for respecting the confidentiality of statistical data and the sanctions in case of breach of these obligations has been signed by the individual researcher, by his/her institution, or by the organization commissioning the research, as the case may be, and by ELSTAT.

Issues referring to the observance of statistical confidentiality are examined by the Statistical Confidentiality Committee (SCC) operating in ELSTAT. The responsibilities of this Committee are to make recommendations to the President of ELSTAT on:

- the level of detail at which statistical data can be disseminated, so as the identification, either directly or indirectly, of the surveyed statistical unit is not possible;
- the anonymization criteria for the microdata provided to users;

- the granting to researchers access to confidential data for scientific purposes.

The staff of ELSTAT, under any employment status, as well as the temporary survey workers who are employed for the collection of statistical data in statistical surveys conducted by ELSTAT, who acquire access by any means to confidential data, are bound by the principle of confidentiality and must use these data exclusively for the statistical purposes of ELSTAT. After the termination of their term of office, they are not allowed to use these data for any purpose.

Violation of data confidentiality and/or statistical confidentiality by any civil servant or employee of ELSTAT constitutes the disciplinary offence of violation of duty and may be punished with the penalty of final dismissal.

ELSTAT, by its decision, may impose a penalty amounting from ten thousand (10,000) up to two hundred thousand (200,000) euros to anyone who violates the confidentiality of data and/or statistical confidentiality. The penalty is always imposed after the hearing of the defence of the person liable for the breach, depending on the gravity and the repercussions of the violation. Any relapse constitutes an aggravating factor for the assessment of the administrative sanction.

9. Release policy <span style="float: right;"><a href="#">Top</a></span>
<b>9.1 Release calendar</b>
Not applicable.
<b>9.2 Release calendar access</b>
Not applicable.
<b>9.3 User access</b>
In compliance with Community legislation and the European Statistics Code of Practice, ELSTAT releases all national statistical data on its webpage, fully observing professional independence and with a view to ensuring the simultaneous, equal and timely access of all users to statistical data. Neither users nor any government bodies have access to data before their official release.

10. Frequency of dissemination <span style="float: right;"><a href="#">Top</a></span>
Annual.

11. Dissemination Format <span style="float: right;"><a href="#">Top</a></span>
<b>11.1 News release</b>
No Press Release is compiled.
<b>11.2 Publications</b>
EU Member States are obliged to transmit the data to Eurostat 21 months after the end of the reference year. The survey results are not announced through a press release.
<b>11.3 On-line database</b>
A publication containing exclusively air emissions data is not compiled yet because the main data of the National Inventory compiled by the YPEKA-NTUA are continuously revised on the basis of the mathematic model applied for the compilation of these data, therefore all these changes and revisions should be reflected in a potential relevant publication. Selected data deriving from the NAMEA tables are included in the publication of ELSTAT <i>“Living Conditions in Greece”</i> , in the chapter <i>Environment</i> . The on-line data base is the corresponding on-line database of Eurostat.

#### **11.3.1 Data tables - consultations**

Total access to the website as regards the above survey for the year 2013 amounts to 465 hits.

#### **11.4 Micro-data access**

Microdata are made available to users after their submitting a request to the:

Division of Statistical Information and Publications

46, Peiraios and Eponiton Str.,

18510 Piraeus

Tel: +30 213 135 2173

Fax: +30 213 135 2022

e-mail: [data.dissem@statistics.gr](mailto:data.dissem@statistics.gr)

#### **11.5 Other**

Data can be provided to users (given the fact that statistical confidentiality is always observed) usually by fax or e-mail, by submitting a relevant data request. Users have to submit their request, describing in details the requested data, to the Division of Statistical Information and Publications. The requests must be submitted electronically to the following e-mail address: [data.dissem@statistics.gr](mailto:data.dissem@statistics.gr) and [data.supply@statistics.gr](mailto:data.supply@statistics.gr)

#### **11.5.1 Metadata - consultations**

Metadata are published on the webpage for the first time.

### **12. Accessibility of documentation**

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#### **12.1 Documentation on methodology**

Methodological Manual for Air Emission Accounts of Eurostat, 2009, available at:

<http://bookshop.europa.eu>

#### **12.1.1 Metadata completeness (percentage)**

Metadata completeness is 100%.

#### **12.2 Quality documentation**

The data which are transmitted to Eurostat are accompanied by a relevant Quality Report which outlines the methods of compilation of NAMEA tables.

### **13. Quality management**

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#### **13.1 Quality assurance**

Data for the compilation of air emissions accounts derive from the annual inventory of YPEKA on air emissions in Greece. Data collection and estimation methods, as well as the survey results are subject the control of the UN, on a yearly basis. This control validates and ensures, at a satisfactory level, the quality of data.

#### **13.2 Quality assessment**

The quality of the data is considered satisfactory.

### **14. Relevance**

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#### 14.1 User needs

The data on air emissions fully meet users' needs. Furthermore, data on environmental accounts and air emissions are an important source of information for national and international users, government agencies and research institutes.

#### 14.2 User satisfaction

The Statistical Information Dissemination Section of ELSTAT conducts a survey on user satisfaction, the results of which are available at the link:

<http://www.statistics.gr/portal/page/portal/ESYE/PAGE-conferences>

#### 14.3 Completeness

On the basis of users' needs, completeness is considered satisfactory.

### 15. Accuracy and reliability

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#### 15.1 Overall accuracy

Primary data on air emissions are collected and estimated by the NTUA (School of Chemical Engineering). The estimation methods are checked by the UN – UNFCCC (United Nations Framework on Convention on Climate Change) and by the European Environmental Agency (Convention on Long-range Trans-boundary Air Pollution).

#### 15.2 Sampling error

No sampling error.

#### 15.3 Non-sampling error

No non-sampling error.

##### 15.3.1 Coverage error

No coverage error.

###### 15.3.1.1 Over-coverage rate

No over-coverage.

###### 15.3.1.2 Common units (percentage)

Not applicable. The survey data are collected from administrative sources.

##### 15.3.2 Measurement error

No measurement error.

##### 15.3.3 Non response error

No non-response error.

##### 15.3.4 Processing error

No processing error.

##### 15.3.5 Model assumption error

The model for the estimation and compilation of air emissions data is developed on the basis of the principles of the International Panel for Climate Change (IPCC) and the relevant results are subject to the control of the UN, on a yearly basis.

### 16. Timeliness and punctuality

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## 16.1 Timeliness

The data are disseminated 21 months after the end of the reference year.

## 16.2 Punctuality

Air emissions data are transmitted to Eurostat without delays.

## 17. Comparability

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### 17.1 Comparability – geographical

The data are fully comparable among EU Member States.

#### 17.1.1 Assymetry for mirror – flows – statistical (coefficient)

Not applicable.

### 17.2 Comparability – over time

The data for the years 1995-2009 are fully comparable. From 2008 onwards, in the light of the revision of NACE Rev. 2, the relevant changes were implemented on the individual estimations of air emissions data. Data for the period 1995-2009 are estimated on the basis of the old system, while the data for 2008-2012 are based on the new system. After the completion of the revision of National Accounts on the basis of ESA 2010, the data for all the time series from 1995 to 2012 will be revised accordingly.

## 18. Coherence

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### 18.1 Coherence cross-domain

There is cross-domain coherence.

#### 18.1.1 Coherence – sub annual and annual statistics

Not applicable. The results are compiled only on an annual basis.

#### 18.1.2 Coherence – National Accounts

The produced data are coherent with the corresponding data of National Accounts.

### 18.2 Coherence - internal

The results of the survey are characterized by internal coherence.

## 19. Cost and Burden

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Data derive from YPEKA, therefore there is no burden for ELSTAT in terms of data collection and data processing. The administrative cost of ELSTAT has not been estimated.

## 20. Data revision

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### 20.1 Revision policy

According to the mathematic model applied by the inventory team of the NTUA, when estimating the values of the following year, the data of the previous year are concomitantly revised. Therefore, each year, the data of the previous years are revised backwards. The structure of this model is based on the principles of the International Panel on Climate Change (IPCC).

On the basis of this process, the data are revised accordingly by ELSTAT.

## **20.2 Revision practice**

The data of NAMEA will be revised on the basis of the revised National Accounts data on the basis of ESA 2010.

<b>21. Statistical processing</b>		<b><u>Top</u></b>
<b>21.1 Source data</b>		
The data on air emissions derive from the Annual inventory submission under the convention and the Kyoto Protocol for greenhouse and other gases, compiled by YPEKA.		
<b>21.2 Frequency of data collection</b>		
Annual		
<b>21.3 Data collection</b>		
See paragraph 4.1.		
<b>21.4 Data validation</b>		
Data are validated by: <ul style="list-style-type: none"><li>• the UN – UNFCCC (United Nations Framework on Convention on Climate Change)</li><li>• the European Environmental Agency (Convention on Long-range Trans-boundary Air Pollution)</li><li>• Eurostat.</li></ul>		
<b>21.5 Data compilation</b>		
Once collected, the data undergo logical checks and then the relevant tables are compiled for every air pollutant.		
<b><u>21.5.1 Imputation-rate</u></b>		
Not applicable.		
<b>21.6 Adjustment</b>		
No adjustment.		
<b><u>21.6.1 Seasonal adjustment</u></b>		
There is no seasonal adjustment; the data are estimated on a yearly basis.		

<b>22. Comment</b>		<b><u>Top</u></b>
NAMEA tables for air emissions have been developed by a Eurostat working group and are the result of a long-standing, painful and collective work, encompassing revisions and changes aiming at continuously enhancing these tables. Therefore, NAMEA tables which include all data on air emissions cover all national requirements and principles.		