

**68TH MEETING OF THE
STATISTICAL PROGRAMME COMMITTEE**

LUXEMBOURG, 13 NOVEMBER 2008

Item 7 of the agenda

*Revised European Strategy for Environmental Accounting
Theme 5.03*

1. RECOMMENDATION FOR ACTION BY THE SPC

The SPC is invited to:

- Endorse the Revised European Strategy for Environmental Accounting, as presented in the draft report of the Task-Force (annex I)
- Endorse the Eurostat's Implementation Plan (annex II)
- Take note of the first draft of the analysis of effects and implications regarding a proposal for a legal base for collection of environmental accounts data (annex III).

2. BACKGROUND

In November 2003, the European Strategy for Environmental Accounting (ESEA) developed by a high level Task Force was endorsed by the Statistical Programme Committee (SPC). It was foreseen that the strategy would need to be revised within five years.

In 2007 the Task Force was re-convened to review and revise the strategy. The mandate of the ESEA Task Force was approved by the Working Group on Environmental Accounts and subsequently by the DIMESA (Director's meeting on Environment Statistics and Accounts). The Task Force met once in 2007 and once in 2008.

The Task Force reviewed the strategy from 2003 in light of country developments in the various types of environmental accounts and their ability and willingness to continue this development while also considering current and developing policy needs. The Task Force also considered a possible legal basis for the area of Environmental Accounting.

The draft report of the Task-Force was presented to the DIMESA in June 2008, together with an implementation plan and a first draft of an analysis of the effects and implications regarding a proposal for a legal base for collecting environmental accounts, both developed by Eurostat. There was a general support to the proposed revised strategy and to the implementation plan, but some concerns were expressed about the opportunity to develop a legal base.

3. POLICY CONTEXT

Since the adoption of the first ESEA in 2003, European leaders have recognised the important role of Environmental Accounting, as an instrument to measure targets of Sustainable Development, of the Lisbon strategy and the of EU environmental policy.

In June 2006, the European Council adopted “an ambitious and comprehensive renewed EU Strategy for Sustainable Development.” It was then stated that: “For better understanding of interlinkages between the three dimensions of SD, the core system of national income accounting could be extended by inter alia integrating stock and flow concepts and non-market work and be further elaborated by satellite accounts e.g. environmental expenditures, material flows and taking into consideration international best practices.”

The EU's seven environmental thematic strategies were also relevant input to the revision of the ESEA. These seven thematic strategies are based on the priorities of the 6th EU Environmental Action Programme and refer to: air pollution; prevention and recycling of waste; protection and conservation of the marine environment; soil; sustainable use of pesticides; sustainable use of resources; urban environment.

Finally, at the conference on 'Beyond GDP' in November 2007 Commissioner Dimas on the part of the European Commission announced that a policy Communication will be presented in 2008 developing the conclusions of the conference into a roadmap for action. He concluded that *"we will also need to speed up and improve the development of integrated accounting in the social and environmental spheres"*. According to Commissioner Almunia, in the long term, integrated environmental and economic accounting is likely to be the *"strongest tool"* for supporting the promotion of well-being and progress¹.

4. CONSEQUENCES OF THE PROPOSAL FOR THE MEMBER STATES

The main objective of the revised strategy is to ensure the availability of important environmental accounts data from all European countries and to enable these data to be harmonised, timely and of adequate quality, in order to facilitate their use in developing and informing policy.

A key element is to focus the implementation work on a core set of priority areas where data sources exist and where accounts should be produced regularly and in a timely fashion. Resource requirements for environmental accounting are quite small. Key environmental accounting areas are now largely developed, a large part of the initial investment has been made and human resources are already in place in many countries. The value added of environmental accounting is however considerable through making best use of environmental statistics and other data and significantly enhancing analytical uses of statistical data.

Primary data for environmental accounting, alongside the national accounts, are environment, energy, transport, forestry and other statistics as well as other data held by ministries, specialised institutions and environmental agencies. Environmental accounts do not generally require new data collection but create additional uses for national accounts data (e.g. supply-use and input-output tables), for environment statistics and other areas of statistics.

5. OUTSTANDING ISSUES

At this stage, only a draft version of the analysis of the effects and implications regarding a proposal for a legal base for collection of environmental account data is presented in annex III. In particular, a proper estimation of the requirement for new resources in the Member States is not yet possible, as it will depend on the content of the proposal. The analysis will be improved and completed during the process of defining this content. A revised version will accompany the proposal when submitted to the SPC.

¹ Please consult <http://www.beyond-gdp.eu/> for further information.

6. RISK ASSESSMENT

Failure to provide EU-wide data would have several consequences. Accounts and indicators that are needed to inform policy makers will be compiled outside the Statistical System in ad-hoc ways, less well co-ordinated with socio-economic statistics, without the use of agreed standards, and delivering less reliable and less comparable results. The benefits from a European approach (common standards, sharing of best practices, comparable data etc.) will not materialise whereas environmental issues are often of an international nature. Failure to implement an approach towards integrating economic and environmental data sets will make regular data collection less efficient and will permit less use of existing data. The substantial investment in environmental accounting would not be utilised fully.

7. NEXT STEPS

Once approved by the SPC, the revised ESEA 2008 will be implemented by Eurostat according to the plan presented in annex II.

A draft proposal for a legal base to cover the collection of Environmental Accounts data from Member States will be submitted for opinion to the SPC before the end of 2009. It will be accompanied by a revised and completed version of the analysis of its effects and implications.

The European Strategy for Environmental Accounting - Draft report from the ESEA Task Force

Maintaining Europe's leadership in environmental accounting is important and is one reason the existing ESEA-2003 has been reviewed and renewed. Accelerating the production of data, documenting existing statistical collection approaches, extending environmental accounting methodologies and encouraging the use of accounting data in policy relevant analyses are some of the driving forces for focusing the European efforts regarding environmental accounts.

Environmental-economic accounting helps to bring together statistics in coherent frameworks or accounts that allow disparate datasets to be coordinated in such a way that cross-cutting analyses can be made with confidence. The accounting framework allows an evaluation of the different sets of information included in the accounts and helps to eliminate double counting and identify areas that are not yet covered in the statistics collected.

Once the datasets have been coordinated, already existing analytical methodologies, such as input-output analysis, can then be extended to include environmental and potentially social dimensions. But these types of methodological analytical extensions require datasets that use the same system boundaries and classification systems for the different types of data included in so-called integrated accounts in order to produce reliable results. This is the particular advantage of environmental accounting over a set of different environmental statistics.

The main recommendations of the Task Force is to formulate a strategy that will help to assure the availability of important environmental accounts data from all European countries and will enable these data to be harmonised, timely and of adequate quality, in order to facilitate their use in developing and informing policy. In addition, the strategy will also encourage the further development of environmental-economic accounts as a statistical area.

This is a European strategy for environmental accounting with a focus on the statistical developments that are needed. In Europe, Eurostat and the European Environment Agency are taking the lead in the data and methodological developments for environmental accounts. They actively seek collaboration with researchers and international bodies such as OECD and UNCEEA.

1. REVISING THE 2003 EUROPEAN STRATEGY FOR ENVIRONMENTAL ACCOUNTING (ESEA)

In 2003, the European Strategy for Environmental Accounting (ESEA) was developed by the high level Task Force 'European Strategy for Environmental Accounting' and was adopted by the Statistical Programme Committee (SPC). It was foreseen that the strategy would need to be revised within five years.

In 2007 the Task Force was re-convened to review and revise the strategy. The mandate of the ESEA Task Force was approved by the meetings of the Working Group on

Environmental Accounts and subsequently the DIMESA (Director's meeting on Environment Statistics and Accounts) in 2007. The Task Force met once in 2007 and once in 2008.

The Task Force was to review the strategy from 2003 in light of country developments in the various types of environmental accounts and their ability and willingness to continue this development while also considering current and developing policy needs. The Task Force was also asked to consider a possible legal basis for the area of Environmental Accounting.

2. DEVELOPING ENVIRONMENTAL ACCOUNTS

The tasks for developing and implementing environmental accounting have been a shared international effort. The London Group and the United Nations Statistical Division has contributed largely to the conceptual developments through their work with the SEEA (1993, 2003-draft, Operational manual 2000). In Europe, Eurostat has contributed to the process of harmonization, the development of compilation guides and has provided assistance to help establish the production of data at the national level in European countries. In addition Eurostat has calculated EU estimates.

Work on analysis, tools and methodologies has largely been initiated by countries and research institutes and has been used to bring the analytical results into the policy making sphere. All of these different developments, conceptual, methodological, analytical and policy use are part of environmental accounting and will need to continue to develop in a cooperative way in the future.

The handbook for Integrated Environmental and Economic Accounting (SEEA 2003) describes four main types of environmental accounts:

1. Physical flow accounts including hybrid (NAMEA) accounts;
2. Economic information on the environment (economic activities and products related to the environment and other environmentally related transactions);
3. Natural resource asset accounts;
4. Valuation of non-market flows and environmentally adjusted aggregates (adjusted for depletion, degradation and defensive expenditures).

Development in all of these different areas continues and needs to be encouraged in the future, however, the Task Force recommends that the European Statistical System (ESS) will focus on specific areas in the coming period in order to establish these important information systems in all European countries. To help identify where to focus the efforts, a review of the state of play has been made.

3. ENVIRONMENTAL ACCOUNTING IN EUROPE, STATE OF PLAY

In 1994, the European Commission identified the main lines of action for the development of a *Green National Accounting* framework based on satellites to National Accounts². Since then, Eurostat, in collaboration with Member States' statistical offices

² COM (94) 670 Directions for the EU on Environmental indicators and Greened National Accounting – Integration of Environmental and Economic Information Systems.

and DG Environment's financial support, has developed and implemented different accounting modules that cover almost all types of accounts of the *System of Environmental and Economic Accounting* (SEEA) and in the *European Strategy for Environmental Accounting* (ESEA 2003).

In the context of revising the ESEA in 2008, Eurostat commissioned a study in 2006 to assess the progress made by European countries in the compilation of Environmental Accounts from 2000 onwards in order to facilitate the strategic planning for the further development of Environmental Accounts in Europe towards 2010 and beyond. This assessment is based on the examination of 135 reports on pilot studies, as well as on an interview survey to experts in charge of Environmental Accounts in the European countries³.

Regarding Environmental Protection Expenditure, Economy-Wide Material Flow Accounts, and NAMEA air emissions, an excellent state of play is seen for 6 countries: Germany, Italy, Austria, Finland, Sweden and United Kingdom. They are already compiling statistics for all three accounts on a regular basis. Another 14 countries (Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Spain, France, Lithuania, Hungary, Netherlands, Poland, Portugal, Slovenia, and Norway) are active in all three areas too.

Ireland does not compile Environmental Expenditure data but is engaged in the two other modules. Cyprus, Latvia, Romania and Switzerland are not compiling NAMEA air emission accounts, but are involved in the two other areas. It should be noted that except for Ireland and Cyprus, all these countries are involved in other areas of environmental accounting such as Accounts for Environmental Taxes and also Asset Accounts.

Greece and Slovakia only compile Environmental Expenditure data. Luxembourg and Malta do not compile Environmental Accounts at all.

In addition to the efforts by the European Statistical System, the European Environment Agency (EEA) is playing an important role in developing ecosystem and land use accounts, as well as performing analyses of existing data from environmental accounts to identify patterns of sustainable consumption and production. The demand for the spatial dimension to be included in datasets as well as the functioning and valuation of ecosystems is increasing and the EEA is taking the lead in developing these areas. The Task Force recommends that Eurostat and the EEA cooperate closely on these developments.

4. ENVIRONMENTAL ACCOUNTING WORLDWIDE

At the international level, the London Group prepared a handbook on integrated environmental and economic accounts (SEEA). The draft version was approved by the UN Statistical Commission (UNSC) in March 2002 (SEEA 2003).

³ Environmental accounts - State of play of recent work. Report to Eurostat, 2008. Carried out by Jean-Louis Pasquier, KRD-Services. The full report will be available on Eurostat's Website in the dedicated section for environmental accounts (http://epp.eurostat.ec.europa.eu/pls/portal/url/page/PGP_DS_ENVACC/PGE_DS_ENVACC).

In March 2005 the UNSC established the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEAA), which overall objectives are: (a) to mainstream environmental-economic accounting and related statistics; (b) to elevate the System of integrated Environmental and Economic Accounting (SEEA) to an international statistical standard; and (c) to advance the implementation of the SEEA in countries.

The SEEA 2003 is currently being revised by UNSC in conjunction with the London Group under the auspices of UNCEEAA. The aim of the revision is to prepare a statistical standard covering all aspects of environmental accounting, expected to be approved by the UN Statistical Commission in 2012.

On the other hand, other important work is being done by other partners. OECD is developing a comprehensive set of documents on Material Flow Accounts, some of which in close cooperation with Eurostat. The ESEA 2008 takes into account the ongoing revision of the SEEA 2003 and other international initiatives referred to above.

5. ENVIRONMENTAL ACCOUNTING POLICY DEMANDS AT EU AND NATIONAL LEVEL

Since the adoption of the first ESEA in 2003, European leaders have recognised the important role of Environmental Accounting, as an instrument to measure targets of Sustainable development, of the Lisbon strategy and the of EU environmental policy.

During its 15-16 June 2006 meeting, the European Council adopted “an ambitious and comprehensive renewed EU Strategy for Sustainable Development.” In the renewed Sustainable Development Strategy it is stated that: “For better understanding of interlinkages between the three dimensions of SD, the core system of national income accounting could be extended by inter alia integrating stock and flow concepts and non-market work and be further elaborated by satellite accounts e.g. environmental expenditures, material flows and taking into consideration international best practices.”

In March 2005, the European Council re-launched the Lisbon strategy and New Integrated Guidelines for Growth and Jobs 2005-8 were adopted in June 2005. They provide guidance to Member States and the Commission for establishing reform programmes. Guideline 11, which has the main direct relevance for the environment, includes recommendations on the major environmental policy issues with an economic dimension: renewable energy, transport, use of economic instruments, implementation of the Environmental Technologies Action Plan (ETAP), biodiversity, climate change and the Kyoto targets. Environmental accounts could be used to monitor EU and European countries' progress in these areas.

The EU's seven environmental thematic strategies are also relevant input to the revision of the ESEA. These seven thematic strategies were adopted by the European Commission during 2005-2006, are based on the priorities of the 6th EU Environmental Action Programme and refer to: air pollution; prevention and recycling of waste; protection and conservation of the marine environment; soil; sustainable use of pesticides; sustainable use of resources; urban environment.

In November 2007, during the high level conference on “Beyond GDP” held in Brussels, the European Commission announced that a policy communication would be presented in 2008 developing the ideas of going “beyond GDP” into a roadmap for action.

Improvement and development of integrated accounting in the social and environmental spheres were part of this announcement. This communication is expected to be issued in autumn 2008.

Also at the national level, the accounts can serve a number of policy purposes. As the accounts describe the environmental pressure from the economy as a whole, both production and consumption, it is possible to look further than established environmental policy, and distinguish other trends than are usually apparent from sectoral statistics. Analyses are made on the performance of different industries, on public authorities and on households.

It is possible to see how trade of goods and services affect the overall environmental pressure of the economy. Through the connection to the national accounts, the linkage to standard economic models is easily made, be they econometric or general equilibrium models. It is possible to link to employment data, and thus to analyse some of the trade-offs that are debated in the environmental-economic area. Analysis of different types of households can be made through linking to household data.

Moreover, the accounts give the possibility to assess the importance and the coverage of the economic instruments that are being used as a complement to the legal instruments in environmental policy.

6. ASSESSMENT OF THE ESEA

The ESEA Task Force has observed the following concerning the 2003 ESEA:

In general, the document is of good quality and is still reasonably up-to-date. Environmental accounts are a flexible, multi-purpose system allowing analyses which can answer long-term political questions and informing about strategic direction. The existing ESEA-2003 is a comprehensive document. As a first step, this proved to be very helpful since it constituted an exhaustive inventory of all modules of environmental accounts and the recognition of the huge variety of work the environmental accounts encompass.

However, some adjustments to the ESEA are recommended to reflect recent changes in environmental, economic and political priorities. Main challenges considered are:

- Data collection in all areas proved to be very difficult (or even impossible) especially under the current gentlemen's agreement regime. It is preferable to concentrate effort in collecting data in some limited modules rather than dispersing our energy in all modules with little use as no complete European picture emerges from fragmented data.
- Data collected on a gentlemen's agreement are not generally of sufficient quality, in terms of harmonisation, country and time coverage, and reference to the modules of environmental accounts. It is necessary to go one step forward and adopt an EU regulation for data collection on environmental accounts (for the priority modules).
- To make the accounts politically relevant at EU level they have to have broad coverage of data provided with adequate timeliness.
- Environmental accounts developed and compiled in Europe needs to be concordant with the SEEA and the ongoing revision of this manual. International cooperation (UNSD, UNECE, UNEP, OECD, etc.) and cooperation with the main actors in

Europe (DG Environment, EEA and JRC) is also vital for the use and further development of environmental-economic accounts

- Increasing focus on products and sustainable consumption patterns, product policies and green procurement rather than just on production and industries. Methodologies to include this focus need to be developed.
- Increasing focus on market based instruments, like taxes, emission trading schemes, environmental subsidies and potentially environmental harmful subsidies. Once the data is available on these issues the Environmental Accounts form an excellent basis for analysing these phenomena. The understanding that environment protection also creates business opportunities which puts a focus on environmental protection revenues and job creation (instead of only looking at expenditure).
- It is important to give higher visibility to environmental accounts by using the data as sources for indicators and analysis. The promotion of environmental accounts to decision makers, researchers, policy analysts, think tanks and NGOs and the public is an important vector of development.
- Ecosystem accounts were identified as a rapidly developing field attracting increasing interest. These accounts complement the traditional environmental economic accounts. The Environmental Accounts have the perspective of the economy and ask how much pressure the economy puts on the environment and how much it costs to prevent and/or reduce these pressures. Eco-system accounting complements this view by asking how much the eco-systems contribute to value added, societal welfare and human well-being and to which extent economy and society are adversely affected by environmental degradation.

7. THE RENEWED EUROPEAN STRATEGY FOR ENVIRONMENTAL ACCOUNTING

This strategy will help to assure the availability of important environmental accounts data from all European countries and will enable these data to be harmonised, timely and of adequate quality, in order to facilitate their use in developing and informing policy. In addition, the strategy will also encourage the further development of environmental-economic accounts as a statistical area.

The Task Force identified the following main *objectives* for the ESEA-2008:

- At European level, to give priority to regular production of a *core set of accounts*.
- At national level, that National Statistical Institutes maintain and potentially expand their work on environmental accounting, with the main objective of providing *harmonised, timely data with appropriate quality*.

In line with the diagnosis described in section 6 and with the intention of reaching the objectives enumerated above, the Task Force agreed on a set of **recommendations** for the renewed European Strategy for Environmental Accounting.

The recommendations are the following:

- 7.1. Setting priorities between the four main types of environmental accounts described in section 2
- 7.2. Setting priorities taking scarcity of ESS resources into account
- 7.3. Establishing a legal base for Environmental Accounts

- 7.4. Providing harmonised, timely data of appropriate quality
- 7.5. Promoting Environmental Accounts to policy makers, researchers and policy analysts
- 7.6. Next revision of the European Strategy for Environmental Accounts (ESEA)

7.1. Setting priorities between the four main types of environmental accounts

Eurostat's priority setting is at this stage clearly driven by both data availability and availability of methodologies for certain modules of environmental accounting. Still the utility of the modules compiled, both at country level and at European level, has to be considered regarding both user needs and policy relevance but also analytical possibilities.

The Task Force recommends that the priority for environmental accounts will focus primarily on physical and monetary flows including hybrid (NAMEA) accounts, economic information on the environment (economic activities and products related to the environment and other environmentally related transactions such as taxes and subsidies). More specific recommendations for these accounts are described in section 7.2.

In the late 1990s some of the work on Environmental Accounts in Europe was focussed on natural resource assets including the subsoil assets of petroleum and natural gas, fish and forest assets. Asset accounts are important for some countries and the implementation of asset accounts in countries with substantial natural resources is encouraged.

However, after European-wide pilot data collections were made for petroleum and natural gas subsoil assets and forests, it was decided that the subsoil assets are primarily important for those countries with an abundance of these types of natural resources but that European-wide collection will not be given a high priority. Therefore, in the near future, only forestry accounts will be collected as part of the forestry statistics reporting system.

In addition, national wealth calculations and indicators requiring natural resource asset data will also not be considered a high priority at this time.

In 2007 the Task Force re-affirmed the position stated in the 2003 strategy that the valuation of environmental damages and degradation and adjusted national accounts aggregates are not given priority at the European level as part of the ESEA. However, if such exercises are undertaken by countries or research institutes, then the national statistical institutes are encouraged to contribute with their expertise and by providing environmental accounts data.

7.2. Setting priorities taking scarcity of ESS resources into account

Some of the environmental accounts are advanced enough with regard to methods and to data availability in the European countries that regularly reported data to Eurostat can be expected.

With the limited resources, human and financial, available currently in the ESS and at Eurostat, the following modules could be implemented in the near future (within approximately 2 years): some types of environmental expenditure accounts especially those that feed into the Joint Questionnaire on environmental protection expenditures and revenues, NAMEA air emission accounts and economy-wide material flow accounts. It is also expected that estimations for EU-aggregates would also be desirable.

The development in the medium term (2-3 years): data collection for the areas of NAMEA energy and NAMEA waste accounts, and environmentally related transactions (e.g. environmental taxes, environmental subsidies) according to standard industry breakdowns should be considered.

In the longer run (4-5+ years) – after the development of adequate methodologies and data availability – the data collection should be extended to include economic activities and products related to the environment (for example, Environmental Goods and Services Industry), transactions related to resource management, MFA according to industry breakdowns and potentially NAMEA water accounts.

In addition to the focus placed on these core areas, the Task Force recognises that developments of other types of Environmental Accounts are necessary. By supporting the ongoing revision of the SEEA to which the London Group contribute, a number of European countries and Eurostat will ensure that the development of accounts that meet policy requirements in the future is taking place.

Cooperation with the European Environment Agency (EEA) in the area of eco-system accounts and land use is foreseen as well as close cooperation in the use of environmental accounting data for analytical and research purposes. Collaboration on all themes for which a European Environmental Data Centre is established shall take place. The work done by the OECD and UNEP shows that material flows, resource productivity and efficiency are important areas in which Eurostat and European countries need to participate and contribute.

7.3. Establishing a legal base for Environmental Accounts

In section 5 the description of policy demands on EU and national level formulated a pressing demand that environmental accounting data become available as soon as possible to support the analysis and development of environmental policy. European level estimates are also needed in a number of different areas and especially with respect to indicators.

In order to assure full data coverage and harmonisation, it is recommended to initiate the formulation of a legal base for environmental accounts. This means that, under a framework regulation, the European Member States will be obliged to transmit data on a number of modules of the environmental accounts. Only modules, where the methods are well described, are accepted among the Member States and are priorities at the European level, will be included in a first stage. Other modules can be added when they are esteemed to be mature enough and shown to add utility enough to be included.

The legal basis is expected to ensure the means to reach the objectives. It will help ensure that adequate resources for the establishment of data compilation systems, for the

development of environmental-economic accounts, for the regular production of timely, statistical environmental accounting data of good quality become available at the NSIs.

7.4. Providing harmonised, timely data of appropriate quality

In complement to the legal basis, and in order to assist the European countries in the establishment of these national environmental-economic accounting systems, Eurostat will continue to: - develop manuals, compilation guidelines, and handbooks; - ensure that these tools are used when compiling national EA; - and provide trainings to help facilitate the compilation of environmental accounts in European countries that are harmonised and internationally comparable. Eurostat will also help countries establish systems for environmental accounts through available financing programs such as grants, in particular addressing the countries where environmental accounts are not yet developed to an adequate degree.

The existence of an agreed set of compilation methods and manuals is vital for improving data quality, coverage and harmonisation. The Task Force recommends that adequate resources are allocated both in Eurostat and also in the European NSIs to ensure the development of methodologies and manuals.

Together with ensuring data availability, better timeliness of the data is crucial. In the short to medium run, Eurostat will in cooperation with researchers and the European countries develop methods to estimate more current data which can be very useful for policy purposes. The efforts should focus on areas where methods are mature enough and compilation methods and harmonisation already have been obtained to a large degree.

On the even longer term it could be expected that user demands will instigate the development of sound data estimation systems that would be able to now-cast data with an even shorter time lag.

7.5. Promoting Environmental Accounts to policy makers, researchers and policy analysts

The formulation of a strategy for disseminating Environmental Accounts is a core part of the work of the UNCCEA (UN Committee of Experts on Environmental - Economic Accounting).

The European countries are promoting EA mainly via websites and publications. At EU level Eurostat is promoting this tool mainly via the web site dedicated section to EA and their contribution to the Structural Indicators and the Sustainable Development Indicators.

DG Environment, the Joint Research Centre, Eurostat and the European Environment Agency (the so-called "Group of Four") are developing the so-called Environmental Data Centres (EDC), which aim is to facilitate gathering and assessment of environmental data with a view to supporting overall environmental policy goals. The environmental accounts can be an important data source for the EDCs and, in the future, they are expected to be an excellent tool for disseminating environmental accounts. Eurostat is responsible for three Data Centres: EDC on Natural Resources, EDC on Wastes and EDC on Products, and it will play an important role due to the EU focus on sustainable production and consumption patterns, product policies and green public procurement.

To be able to answer some of the challenges raised in e.g. the focus on sustainable production and consumption patterns etc. the analytical aspects of environmental accounting have to be explored and developed and the results further promoted. Among the challenges to consider in the longer run – not mentioned in the strategy above - could be: comparing pressures on the environment with the carrying capacity of the environment; accounting for ecosystem services; valuation; tools to analyse how degradation of the environment harms the economy (today and in the future); measure how much employment is generated by environmental protection activities, evaluation of whether market-based policy instruments are increasingly used.

7.6. Next revision of the European Strategy for Environmental Accounts (ESEA)

Having in mind a quickly evolving world where economic, environmental, social and political priorities change rapidly, it is proposed to revise the ESEA on a 5 year basis and reconvene the ESEA Task Force as needed for this purpose.

8. ABBREVIATIONS

DG	Directorates-General
DIMESA	Director's meeting on Environment Statistics and Accounts
EA	Environmental Accounts
EDC	Environmental Data Centres
EEA	European Environment Agency
EFTA	European Free Trade Association
ESEA	European Strategy for Environmental Accounts
ESS	European Statistical System
ETAP	Environmental Technologies Action Plan
EU	European Union
EW-MFA	Economy-wide Material Flow Accounts
JRC	Joint Research Centres (a DG of the European Commission)
MFA	Material Flow Accounts
NAMEA	National Accounting Matrix Including Environmental Accounts
NSI	National Statistical Institutes
OECD	Organisation for Economic Cooperation and Development
SEEA	Handbook of National Accounting – Integrated Environmental and Economic Accounting
UNCEEA	UN Committee of Experts on Environmental - Economic Accounting
UNECE	Economic Commission for Europe of the United Nations
UNEP	United Nations Environment Program
UNSC	United Nations Statistical Commission
UNSD	United Nations Statistical Division

EUROSTAT'S ENVIRONMENTAL ACCOUNTING ACTION PLAN 2009-2010

Introduction

At the conference on 'Beyond GDP' 19-20 November 2007 Commissioner Dimas on the part of the European Commission announced that a policy Communication will be presented in 2008 developing the ideas of going 'beyond GDP' into a roadmap for action. He concluded that "we will also need to speed up and improve the development of integrated accounting in the social and environmental spheres". According to Commissioner Almunia, in the long term, integrated environmental and economic accounting is likely to be the "strongest tool" for supporting the promotion of well-being and progress⁴.

In 1994, the European Commission identified the main lines of action for the development of a *Green National Accounting* framework based on satellites to National Accounts. Since then, Eurostat, in collaboration with European countries' statistical offices and DG Environment's financial support, has developed and implemented different accounting modules that cover almost all types of accounts of the *System of Environmental and Economic Accounting* (SEEA) and in the *European Strategy for Environmental Accounting* (ESEA). The ESEA was approved by the SPC in 2003, and prioritised the development of different modules as described in section 0 below.

In the context of revising the ESEA in 2008, Eurostat commissioned a study to assess the progress made by European countries in the compilation of Environmental Accounts from 2000 onwards in order to facilitate the reflection on the further development of Environmental Accounts in Europe towards 2010. This assessment is based on the examination of 135 reports, as well as on an interview survey to experts in charge of Environmental Accounts in the European countries⁵.

20 EU countries plus Norway and Switzerland have a programme for Environmental Accounts of which 6 countries have a legal basis for the accounts. A main conclusion from the assessment was that Eurostat's priorities and methodological support is the most important factor influencing the countries' decision to develop one module or another. One can estimate that a large amount of the total Environmental Accounts data produced since 2000 resulted from pilot studies that were financially supported by the European Commission. A large number of countries have expressed that a lack of resources is a main barrier encountered for developing Environmental Accounts.

⁴ Please consult <http://www.beyond-gdp.eu/> for further information.

⁵ Environmental accounts - State of play of recent work. Report to Eurostat, 2008. Carried out by Jean-Louis Pasquier, KRD-Services. The full report will be available on Eurostat's Website in the dedicated section for environmental accounts (http://epp.eurostat.ec.europa.eu/pls/portal/url/page/PGP_DS_ENVACC/PGE_DS_ENVACC).

Setting priorities taking scarcity of ESS resources into account

A Task Force has discussed a draft revised ESEA 2008. The recommendations are divided into the near future (1-2 years), the medium term (2-3 years) and the longer run (4-5+ years):

It is recommended in the near future (within approximately 2 years) to focus the efforts regarding the compilation of environmental accounts on the following modules:

- some types of environmental expenditure accounts especially those that feed into the Joint Questionnaire on environmental protection expenditures and accounts,
- NAMEA air emission accounts (including GHG emissions), and
- economy-wide material flow accounts.

The study on progress in the European countries shows that, in line with these recommendations, the European countries have concentrated most of their efforts in these **three core areas**. In this implementation plan it is recommended to attach the first priority to filling the remaining gaps for these most advanced modules.

In the draft ESEA 2008 it is recommended that the development in the medium term (2-3 years) should include: data collection for the areas of NAMEA energy and NAMEA waste accounts, and environmentally related transactions according to standard industry NACE groups (e.g. environmental taxes and subsidies).

In the longer run (4-5+ years) – after the development of adequate methodologies and data availability – the data collection should be extended to include economic activities and products related to the environment (for example, Environmental Goods and Services Industry), transactions related to resource management, MFA according to industry breakdowns and potentially NAMEA water accounts.

These **secondary priority areas** either offer potential improvement in terms of analysis (energy and environmental tax accounts for NAMEA), benefit from a recent institutional progress (waste and water accounts) or economic development (environment industry).

As part of the strategy, a legal base is being developed for collection of data on Environmental Accounts during 2009. The legal base is proposed to address the framework of Environmental Accounts but data transmission commitments will only concern the most developed core areas. An analysis of effects and implications (as prescribed by the project management methodology in Eurostat) of this initiative will be submitted to the SPC in November 2008.

Another core element of the strategy is to continue Eurostat's Environmental Accounts Grants program in the coming years. Clear priority will be to prepare the European Countries for the legal base.

The aim of this implementation plan for the work in Eurostat on Environmental Accounts is to set targets and determine action that will ensure better data/country coverage for the three Eurostat core areas of the Environmental Accounts. Further the possibility of advancing in other important areas of the environmental accounts will be discussed.

1. THE THREE EUROSTAT CORE AREAS

Goal 1 of the Environmental Accounts implementation plan: by end 2010 all EU Member States and ESS associated countries (hereafter named European countries) are reporting data to Eurostat according to existing guidelines in the three Eurostat core areas. The suggested way of approaching this challenge would be to identify the countries that need to increase the activities in these areas, and to actively encourage and support the development of the missing accounts.

Based on the study “Environmental Accounts – State of Play of Recent Work” it has been possible to describe approximately the development on environmental accounts in the European countries with regard to the three Eurostat core areas. Based on this picture, Eurostat has determined a set of actions that should be taken in order to obtain the goal.

Eurostat core areas for Environmental Accounts Level of activity in the European countries			
Countries	Environmental protection expenditure	Economy-wide material flow	NAMEA Air emissions
Belgium	2	3	2
Bulgaria	2	2	1
Czech Republic	2	2	1
Denmark	2	1	1
Germany	1	1	1
Estonia	2	2	2
Greece	2	3	3
Spain	2	1	1
France	1	2	1
Ireland	3	2	1
Italy	1	1	1
Cyprus	2	2	3
Latvia	2	1	3
Lithuania	2	2	2
Luxembourg	3	3	3
Hungary	2	2	1
Malta	3	3	3
Netherlands	1	2	1
Austria	1	1	1
Poland	2	2	2
Portugal	2	2	1
Romania	2	2	3
Slovenia	1	2	2
Slovakia	2	3	3
Finland	1	1	1
Sweden	1	1	1
United Kingdom	1	1	1
Norway	1	2	1
Switzerland	2	1	3
1	Data availability and use i.e. regular production of accounts		
2	Implementation, present or near future activity		
3	Inactivity, incl. when pilot studies have been carried out at an earlier stage		

Source: The information in the table is collected in connection with the study carried out for Eurostat. It was updated for BE and DK (Economy-Wide material flow) with further information provided by the countries.

The countries have been grouped in three groups according to the level of activity with regard to the three Eurostat core areas and thus with regard to which measures could be appropriate in order to ensure activity in each country in each core area.

6 countries, Germany, Italy, Austria, Finland, Sweden and United Kingdom are already compiling statistics for all three accounts on a regular basis. 13 countries, Bulgaria, Czech Republic, Denmark, Estonia, Spain, France, Lithuania, Hungary, Netherlands, Poland, Portugal, Slovenia, and Norway, are active in all three areas.

Proposed action 1.1

These 19 countries do not probably need more encouragement than the occasional support from the present Eurostat Grants program to continue the development of the activities and participation in scheduled trainings by Eurostat to ensure methodological consistency and learning. The present Eurostat Grant programs will continue to support the further developments of these activities.

Ireland does not compile Environmental Expenditure data but is engaged in the two other modules. Cyprus, Latvia, Romania and Switzerland are not compiling NAMEA air emission accounts, but are involved in the two other areas. Belgium has earlier been very active but the activities are presently slowing to a large extent. For these 6 countries it is suggested that Eurostat will investigate the barriers encountered and identify possible actions to initiate the compilation of Environmental Expenditure and Air Emission Accounts. It should be noted that except for Ireland and Cyprus, all these countries are involved in other 'second-priority' areas of environmental accounting such as Accounts for Environmental Taxes and also Asset Accounts, and thus disclosing another set of priorities. Human resources and know-how could be expected to be available in some of these countries, but a lack of financial resources and lower priorities given to the Eurostat core areas due to specific national priorities could be expected as well.

Proposed action 1.2

Eurostat should contact these 6 countries to identify the underlying reasons for the priority setting regarding Environmental Accounts. Support from the Eurostat Grants could be sufficient to initiate the compilation of the missing accounts combined with methodological support through workshops.

Greece and Slovakia only compile Environmental Expenditure data. Luxembourg and Malta do not compile Environmental Accounts at all. In these 4 countries it is likely that resources available for compiling environmental accounts – both human and financial – to some extent are not available.

Proposed action 1.3

Eurostat should contact these 4 countries to identify the underlying reasons for the priority setting regarding Environmental Accounts. It is possible that serious lack of human and financial resources are the reasons that Environmental accounts have not been developed. In order to circumvent these difficulties, Eurostat's grants programme could facilitate the establishment of so-called twinning projects where more experienced countries assist in the compilation of the accounts.

Data collection using standardized tables takes place in Eurostat in the three Eurostat core areas at present. The plans for data collection in the three core areas are:

	Data Available	Next data collected
<i>Environmental expenditure</i>	1995-2004	For 2005 and 2006 (in 2008)
<i>NAMEA air emission accounts</i>	1990-2004 2005 estimates for EU15, EU25, EU27	For 2005 and 2006 (in 2008)
<i>Economy-wide material flow accounts</i>	EU-15: 1970-2004 (and 2005)	For 2006 (in 2009)

The data availability in Eurostat's NewCronos data base differs from the data available in the countries according to the interview survey referred to on page 1. These differences will be explored as part of the process aimed at increasing data availability at Eurostat.

Even when reporting data regularly to Eurostat, still some countries need help adjusting the methodology used for compiling the accounts and support to be able to compile validated and timely data. Ensuring the quality and timeliness of the data available on European level will be a key goal for the Eurostat Environmental Accounts team.

Proposed action 1.4

Support to countries in developing time-series and timely data could be initiated as part of the grants program.

2. SECOND PRIORITY AREAS

In the draft ESEA 2008 it is recommended that the development in the medium term (2-3 years) should include: data collection for the areas of NAMEA energy and NAMEA waste accounts, and environmentally related transactions according to standard classification of economic activities

In the longer run (4-5+ years) – after the development of adequate methodologies and data availability – the data collection should be extended to include economic activities and products related to the environment (for example, Environmental Goods and Services Industry), transactions related to resource management, MFA according to industry breakdowns and potentially NAMEA water accounts.

These **secondary priority areas** either offer potential improvement in terms of analysis (energy and environmental tax accounts for NAMEA), benefit from a recent institutional progress (waste and water accounts) or economic development (environment industry).

Goal 2 of the Environmental Accounts implementation plan: Further maturation of accounts for environmentally related transactions according to standard industry classification. Utilising existing data for developing NAMEA waste and NAMEA energy for compilation of accounts. Development of methodological frameworks and initial activities in the European countries regarding water accounts and accounts for Environmental Goods and Services Industry.

2.1. Environmentally related transactions

The accounts for environmentally related transactions include e.g. environmental taxes, environmentally relevant subsidies, transactions related to resource management, and for the environmental Goods and Services Industry (see section 2.2. below). In the long run Eurostat aims at developing all accounts for environmentally related transactions. In the short run Eurostat's activities will focus on the environmental taxes:

- a) DG TAXUD is compiling tax revenues by categories (transport, energy, pollution/resources) from the voluntary "detailed tables" received from the national accounts data collection. After further processing of the data, Eurostat disseminates the data in New Cronos.
- b) More detailed information on environmental taxes is obtained through breaking down taxes by category according to industries. In 2001 Eurostat published a guideline and standard reporting tables for environmental taxes by final user which were endorsed by the plenary meeting of environment statistics and accounts in 2003. These tables have a clear link to the NAMEA-air standard tables, especially for the area of energy.

Proposed action 2.1

The data collection on environmental taxes by industry is planned to be annual. Eurostat will support countries to report to the standard tables by industries through the Eurostat Grants program.

2.2. Environmental Goods and Services Industry

The accounts for the Environmental Goods and Services Industry is one of the fastest growing areas when looking at the number of countries involved. The interest in those accounts might be boosted by the high potential of employment creation, eco-innovation and economic growth that is currently expected for such economic activities.

Proposed action 2.2

Complete the Compilation Guide on Environmental Goods and Services Industry as a complete reference tool to develop a data collection system on environmental sector at national level. Finalization, including pilot tests, of standard tables to collect those data.

2.3. NAMEAs for waste and energy

The energy use by industry and households is important and clearly links to the air emissions data and to the analysis that are needed for the climate change and air emission policies. It may be possible to utilize data already available at Eurostat for the areas of NAMEA Waste and NAMEA Energy. For these two areas methods do exist in the context of country studies and the SEEA 2003. In spite of this, no agreed European manuals have been drafted in these areas. On the other hand, as a result of the waste

statistics regulation and the collection of energy balance data, data on waste and energy is to some extent available already in Eurostat which could provide a solid starting point for compiling these accounts. In case Eurostat data is used for compilation of these accounts, it is vital that the countries are asked to validate the results.

Proposed action 2.3

Development of a practical methodology of utilising in house data (from Waste regulation statistics and Energy balances) for the compilation of NAMEA Waste and NAMEA Energy for the European countries. A procedure for validation of the accounts by the countries will be defined.

2.4. Water accounts

Eurostat will carry out a pilot study on the feasibility of compiling water accounts using the framework SEEA-Water approved in 2007 by the UNSC as an intermediate statistical standard. In 2008 Eurostat will, together with EEA, examine the use of this framework for the European reality. Based on this experience a methodology should be developed forming a basis for the compilation of European water accounts.

Proposed action 2.4

European pilot on water accounts (SEEAW), development of methodology, standard tables.

3. EUROSTAT ACTIVITIES SUPPORTING THE DEVELOPMENT OF ENVIRONMENTAL ACCOUNTS IN EUROPEAN COUNTRIES

Eurostat is engaged in a number of activities which complement the efforts to support the development of Environmental Accounts in European countries. In order to achieve the above mentioned Goals 1 and 2 of the implementation plan a number of specified actions have to take place.

3.1. Proposal for a legal base

Eurostat is, in cooperation with the European countries, in the process of revising the ESEA adopted in 2003. Within this process Eurostat intends to prepare a legal base for Environmental Accounts to be proposed by the Commission in 2009, following an analysis of effects and implications of this initiative presented to the SPC in the end of 2008. This proposal will describe a general framework for Environmental Accounts and specify requirements for the areas that are considered sufficiently mature. Depending on this proposal the grants program described in section 0 below will be adjusted accordingly.

Proposed action 3.1.

Draft proposal for a legal base for collection of Environmental Accounts data from Member States.

3.2. Development of methodology and guidelines

The methodologies necessary to compile environmental accounts have been developed in Eurostat Task Forces, with participation of European experts in the different fields. The

methodologies have been approved by the Environmental Accounts Working Group. This work is also associated with the development of the SEEA 2003 and its ongoing revision in which Eurostat and many European countries are active participants.

Proposed action 3.2.

Development of methodologies in the areas of Environmental Goods and Services Industry and water accounts, and also for NAMEA waste and NAMEA energy accounts.

3.3. Workshops on specific areas

Eurostat has a tradition of arranging training in Environmental Accounts at so-called workshops, where the training mostly is undertaken by high-level experts from the European countries. For example in 2007 such workshops were arranged for NAMEA air emissions and for EW-MFA.

Proposed action 3.3.

After assessing the need for training under action points 1.2 and 1.3, Eurostat will decide the need for arranging further workshops or consider other types of arrangements for meeting the training needs in the ESS.

3.4. The Eurostat grants program on Environmental Accounting

The European Strategy for Environmental Accounting (ESEA) was agreed with EU and ESS States and adopted by the Statistical Programme Committee (SPC) in 2003. It is an important tool to implement work on data collection, harmonisation and methodological developments on environmental accounts and environmental statistics.

The ESEA is currently being revised and the goal of this implementation plan is in line with the priorities set in the proposed ESEA 2008 – to be endorsed by the SPC in 2008.

Proposed action 3.4.

In line with the strategy outlined under point 1 and 2 and with the forthcoming revision of the ESEA, continuation of the Eurostat financed Grants program in the coming years in order to intensify the effort done by European countries in producing environmental accounts.

3.5. The dedicated section on Environmental Accounts at the Eurostat web-page

In 2007 Eurostat launched a dedicated section on Environmental Accounting at the Eurostat web-site. The work on the European Environmental Accounts is presented and described on:

http://epp.eurostat.ec.europa.eu/pls/portal/url/page/PGP_DS_ENVACC/PGE_DS_ENVACC

including news on Environmental Accounts, country reports and activities, forthcoming events and links to partners that are involved in the development of Environmental Accounts. This internet site will be used for communication and dissemination purposes for environmental accounts. In 2009 Eurostat will launch a facility on the dedicated section that will enhance online use and combination of the data that also will be presented in the official Eurostat data base.

Proposed action 3.5.

Continuous updating of the dedicated section to be used as a means for information, communication, dissemination and inspiration for the compilers of environmental accounts.

Further development of a data base tool for online use of the environmental accounts data.

3.6. Dissemination and use of the results

From the discussion in the ESEA Task Force it is clear that the development of integrated analysis on the EU-level as well as the national level is needed. In order to complement the set of Environmental Accounts, supply-use tables or input-output tables and analysis could be used to clarify and disseminate the results. An example of this is the work performed for the EEA in analysing the NAMEA air emissions data. These types of analyses also present a link to environmental data centres. Environmental accounts can constitute a good conceptual framework for the development of the data centres for Natural Resources and Products. Development of Environmental Account-based analysis and collaboration between countries is to be encouraged as well.

Proposed action 3.6.

To map the existing environmental accounts types of analysis on European level and make a selection of them available via the internet. To plan the regular production of European analyses together with other relevant actors.

BEYOND 2010

Integrated accounts

The environmental accounts at Eurostat are developed according to international standards for Integrated Environmental and Economic Accounting (SEEA 2003). The system includes both 'flows' of materials (input to the economy, through the economy, outputs from the economy including pollutants, etc.) and stocks of natural assets, all accounted for in a framework that is consistent with the principles of national accounts.

While developing the different modules on the detailed level, it should be ensured that it is possible to maintain the link and the integration with the economic accounts (national accounts). As in the national accounts, the environmental economic accounts and the physical flow accounts are broken down by standard groupings of economic activities (industry by NACE branches, the government and households).

Development of other modules

SEEA 2003 is divided into sets of modules, where the most important are environmental economic accounts, physical flow accounts and assets accounts for environmental assets.

While the goals of this implementation plan for 2009-2010 cover to a large extent the accounts included in the environmental economic accounts and a number of the physical flow accounts, the implementation plan does not include the development of asset accounts for environmental assets (land, ecosystems, subsoil assets, forests, etc.). While the accounting frameworks for subsoil asset accounts and forest (timber) accounts are already available, the methods for land and ecosystem accounting are still in the development phase. The European Environment Agency is taking the lead in this important area. Eurostat will follow and support this work in the coming period, in the longer run the asset accounts should be integrated in and linked to the overall system.

Up to now the focus has been on the environmental pressures and not relating these to the potential thresholds in the environment beyond which the degradation becomes irreversible or threatens the overall integrity of ecosystems. Neither has the focus been on how the degradation of the environment harms the economy. Thus, among the challenges to consider in the longer run – not mentioned in the sections above - could be: comparing pressures on the environment with the carrying capacity of the environment; accounting for ecosystem services; valuation; tools to analyse how degradation of the environment harms the economy (today and in the future); measure how much employment is generated by environmental protection, evaluation of whether market-based policy instruments are increasingly used. Development of regional environmental accounts will be of importance too in the future – specifically for water and waste accounts.

- and development of tools

It would be ideal if the tools for analysis of the Environmental Accounts could be ready when the data will become available, i.e. end 2010. A range of tools are already available, but to utilize these and to instigate the development of further tools, the outreach to policy users, research institutes and policy think tanks ought to start already in 2008.

Due to dependence on the national accounts, environmental accounts are usually only available with three years delay. In some countries, accounts have been compiled using

now-casting or forecasting techniques – in the same manner as in the provisional national accounts. In the longer run Eurostat should investigate the possibility of applying such techniques in order to produce more timely data (T-2) and now-casting of data (T-1 and T+/-0).

ANALYSIS OF THE EFFECTS AND IMPLICATIONS REGARDING A PROPOSAL FOR A LEGAL BASE FOR COLLECTION OF ENVIRONMENTAL ACCOUNTS DATA⁶

FIRST DRAFT

1. PROBLEM DEFINITION

In 1994, the European Commission identified the main lines of action for the development of a *Green National Accounting* framework based on satellites to National Accounts⁷. Since then, Eurostat, in collaboration with Member States' statistical offices and DG Environment's financial support, has assisted European countries in methodology development and data collection through a wide range of pilot studies.

Data in relation to Environmental Accounts is reported to Eurostat in a number of different ways. On a mandatory basis:

- Some data on Environmental Expenditure by industries is collected in connection to the SBS regulation⁸
- Data is transmitted to Eurostat in connection to the ESA 95 regulation⁹ with regard to National Accounts (e.g. supply-use tables, Input-Output tables, COFOG and tax statistics)

By gentlemen's agreement, Environmental Accounts data compiled in National Statistical Institutes (NSIs) is transmitted to Eurostat on a regular basis (yearly or two-yearly) via:

- The Joint Eurostat/OECD questionnaire (environmental protection expenditure and revenues)
- A separate questionnaire on Economy-Wide Material Flows Accounts
- A separate questionnaire on NAMEA air emissions and some energy data
- A separate questionnaire regarding environmental taxes by industry (NAMEA)
- A separate questionnaire regarding forestry accounts

In the areas where data are collected by Eurostat according to gentlemen's agreement, methodologies have been developed in close cooperation with the members of the

⁶ This document is part of the Project Management Methodology of Eurostat. It should be submitted to the SPC before the development of a proposal for a new statistical legal base. At this stage, only a draft version of this analysis is presented. It will be improved and completed during the process of preparing the draft proposal. The revised version will accompany the proposal when submitted to the SPC.

⁷ COM (94) 670 Directions for the EU on Environmental indicators and Greened National Accounting – Integration of Environmental and Economic Information Systems.

⁸ The Data Collection Legislation concerning Structural Business Statistics since 1996 is listed on <http://circa.europa.eu/irc/dsis/bmethods/info/data/new/legaltxts.html>

⁹ Council Regulation (EC) No 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community

European Statistical System as well as other international organisations such as the OECD, UNSD and the European Environment Agency. On all five areas practical guidelines have been developed or are close to finalisation. These guidelines are as close as possible to the methodology of the National Accounts and to the framework used in the SEEA 2003¹⁰ and in the forthcoming revised SEEA (estimated published in 2012).

After many years of experience with data collection based on gentlemen's agreement, it has become evident that this approach is inadequate for the demand posed by policy makers and the research community. After all of our efforts in methodology and support for establishing this area of statistics there remains poor coverage of countries, years and modules of environmental accounts. The ability to ensure appropriate levels of data quality has also proven to be difficult under the coverage of a gentlemen's agreement. In order to ensure full data coverage with adequate levels of quality and harmonisation, it is recommended to initiate the formulation of a legal base for the environmental accounts.

2. OBJECTIVES

The legal basis is expected to ensure the means to reach the following three objectives:

- To implement – in order to support European policy demands - the ideas laid down in the environmental accounts part of the new chapter on satellite accounts to the National Accounts in the forthcoming revised ESA (which is based on the forthcoming revised versions of the SNA and the SEEA).
- To give priority to regular production of a *core set of accounts* (potentially NAMEA air emissions and closely linked to this NAMEA energy; Material Flow Accounts; and environmental economic instruments (e.g. environmental expenditure, taxes and SEEA subsidies)). The priority setting of the modules is based on current policy demands and also on the Revised European Strategy on Environmental Accounts, ESEA 2008.
- To ensure that NSIs maintain and potentially expand their work on environmental accounting, with the main objective of providing *harmonised and timely data of reasonable quality*.

It will help ensure that adequate resources for the establishment of data compilation systems for the development of environmental-economic accounts for the regular production of timely, quality statistical environmental accounting data become available at the NSIs.

3. OPTIONS

The two main options are:

1. Continue data collection using only the present voluntary approach under what is known as a gentlemen's agreement. The possibilities of providing adequate

¹⁰ Handbook of National Accounting: Integrated Environmental and Economic Accounting 2003

statistical information at a European level when only using voluntary reporting are not expected to change if this option is chosen;

2. Go ahead with efforts to establish a legal base to support the data collection on environmental accounts. Having required reporting is expected to provide full data coverage for the modules that will be included in the legislation, and this implies data of better quality and timeliness, more harmonised, and better coverage (countries, years).

4. ANALYSIS OF EFFECTS AND IMPLICATIONS OF THE DIFFERENT OPTIONS

4.1 Option 1: Continue with the gentlemen's agreement as until now.

4.1.1. Effects and implications for citizens and households

No direct effect or implication is expected. They will be indirectly affected by the continued use of scattered and incomplete information used by policy makers that makes their work more fragmented and less coordinated with information regarding the economy and society.

4.1.2. Effects and implications for enterprises

No direct effect or implication is expected. They will be indirectly affected by the continued scattered and incomplete information used by policy makers and their decisions based upon it.

4.1.3. Effects and implications for Member States

Under the current situation which is based on a gentlemen's agreement without any legal base, in the best case scenario the data quality and availability will continue to be at the current, less-than-adequate level or, even more likely, data availability will decrease. In connection to the study 'Environmental Accounts in Europe – State of play' carried out for the Commission in 2007, a number of countries made it clear that the priority setting in their country was to focus almost exclusively on legally required reporting and that data compiled and reported under gentlemen's agreements would cease to be compiled due to a lack of legal requirement. This would also be true for well established statistics in environmental accounts due to budgetary constraints.

4.1.4. Effects and implications for Community policies

There are increasing needs to link information on the environment to information on the economy. Integrated assessments are called upon in several EU action plans and strategies. The assessment of the environmental strategies can be done only if reliable data is available. The current situation based on the gentlemen's agreement does not guarantee data of adequate quality, timeliness and coverage to properly perform this assessment.

By remaining under the gentlemen's agreement there is a risk that missing data will be estimated and collected elsewhere on an ad hoc basis whenever policy demands requires information on the relationship between the economy and the environment. Thus the possibilities to build up a knowledge base and adequate data to answer the policy demands will be limited under the current conditions.

4.2 Option 2: Go ahead with efforts to establish a legal base to support the data collection on environmental accounts

4.2.1. Effects and implications for citizens and households

No direct effect or implication is expected. They will be indirectly affected by the improved information base provided to the policy makers and their decisions based upon it.

4.2.2. Effects and implications for enterprises

There may be some cases of confidential data that will be necessary to manage. Depending on the domains, there might be a change of survey reporting that might affect enterprises. However, Environmental Accounting is mainly about re-organising existing data and not collecting new statistics from enterprises.

4.2.3. Effects and implications for Member States

Environmental accounts do not generally require new data collection but create additional uses for national accounts data (e.g. supply-use and input-output tables), for environment statistics and other areas of statistics. Primary data needed, alongside the national accounts, are environment, energy, transport, forestry, fisheries, air emission inventories and other statistics as well as other data held by ministries, specialised institutions and environmental agencies.

However, some countries will certainly need to be assisted (both financially and technically) in order to establish and maintain this new requirement in their regular statistical data collection. It is expected that a workload increase with the consequent need to increase staff and the concomitant costs will occur at the country level. The proper estimation of this requirement for new resources is not possible for the moment, as it will depend on the content of the future proposal.

On the other hand it should be noted that, based on the replies to the study 'Environmental Accounts – State of play of recent work' carried out for Eurostat in 2007, a number of European countries have declared that Environmental Accounts will not be developed or even continued without a Community legal base, providing the legal right to claim for the necessary resources to fulfil this requirement.

Furthermore, one of the core elements of the ESEA 2008 is to continue Eurostat's Environmental Accounts Grants program in the coming years. Clear priority will be given to prepare the European countries for the legal base, helping to reduce the impact in the establishing phase of new statistical requirements.

4.2.4. Effects and implications for Community policies

The assessment of the 6th Environmental Action Plan and its Thematic Strategies can only seriously be done if reliable data is available. The Thematic Strategy on the Sustainable Use of Natural Resources clearly requires data to build up indicators on decoupling of economic growth from natural pressures and indicators on environmental impact. These indicators are based on data that is currently being collected through gentlemen's agreement. The required consistent and regular production and reporting of environmental accounts would improve the quality of the statistics. Currently the data

used for one of the Structural Indicators and one of the Sustainable Development Indicators is not using country-reported data but has been developed from international databases (for example, from the FAO, UN, USGS). The data for the next indicator reports in 2009 will, for the first time, use country reported data which has been provided under the current voluntary data collection arrangement.

On the other hand, other EU policies (e.g. recycling and prevention of waste, air emissions and climate change, sustainable consumption and production) would be much better monitored if data of good quality linking environment and economy would exist. This data can be collected through the framework of environmental accounts, but it is necessary that every country participates and that harmonisation is fully guaranteed. A legal base for this data collection can ensure these requirements.

The following benefits are also expected: data collection in an important area EU-wide, increased visibility of environmental accounts as a tool for policy monitoring exploring the possibility to link environmental and economic data, possibility to take advantage of the current revision of SNA / ESA and get synergies for data collection.

In order to succeed in this challenge, there is a need to support the implementation of this work through grants, to develop handbooks, standard tables and compilation guides to assist data collection, and to coordinate and harmonise the work. It would be advantageous if this work is coordinated with ESA revision and data collection.

4.3. Summary of risks of keeping status quo

If option 2 is not implemented, the following risks have been identified:

- Risk that data is not appropriately collected to provide EU level estimates and that no final complete data set on environmental accounts is available. Thus resulting in incomplete information on the links between the environment and the economy.
- Risk that analysis is done based on non-official data. This includes a risk that other actors will estimate information on the links between the environment and economy and do what Eurostat and the European Statistical System should do in a more systematic and harmonized way.
- Risk that the EU is not recognised as a worldwide, leading actor in the field of environmental accounts. There is a risk that the effort done until now is wasted without any clear final benefit.

5. THE PREFERRED OPTION

The choice between continuing collecting data on environmental accounts using a gentlemen's agreement or supported by EU legislation clearly points to the second option as the one which produces the best results.

6. CONSULTATION OF INTERESTED PARTIES

- Group of 4 (DG ENV, JRC, EEA): January and June 2008
- Working Group on Environmental Accounts: May 2008.

- Working Group on Environmental Expenditure Statistics: May 2008.
- DIMESA: June 2008
- Statistical Programme Committee: November 2008

7. ROAD MAP

- November 2008: submission of the project and analysis of the effects and implications to SPC for opinion.
- November 2009: submission of the draft proposal to the SPC for opinion.
- End 2009: adoption of the proposal by the Commission
- End 2010: adoption of the proposal by EP and Council.