



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 1.8.2006
COM(2006) 430 final

**REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN
PARLIAMENT**

**on the implementation of Council Regulation (EEC) No 259/93 of 1 February 1993 on
the supervision and control of shipments of waste within, into and out of the European
Community**

**Generation, treatment and transboundary shipment of hazardous waste and other waste
in the Member States of the European Union, 1997-2000**

{SEC(2006) 1053}

TABLE OF CONTENTS

1.	Introduction	4
2.	Generation of hazardous wastes.....	6
3.	Shipment of hazardous wastes out of Member States.....	7
4.	Shipment of hazardous wastes into Member States.....	9
5.	Summary	10

**REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN
PARLIAMENT**

**on the implementation of Council Regulation (EEC) No 259/93 of 1 February 1993 on
the supervision and control of shipments of waste within, into and out of the European
Community**

**Generation, treatment and transboundary shipment of hazardous waste and other waste
in the Member States of the European Union, 1997-2000**

SUMMARY REPORT:
DEVELOPMENTS CONCERNING GENERATION, TREATMENT AND SHIPMENT OF
HAZARDOUS WASTE AND OTHER WASTE IN THE EU MEMBER STATES

1. INTRODUCTION

Waste exports and imports are governed at international level by the Basel Convention of 22 March 1989 on the control of transboundary movements of hazardous wastes and their disposal. The European Community is a party to this Convention and has transposed it by Council Regulation (EEC) No 259/93¹, the so-called Waste Shipment Regulation. In force since May 1994, its purpose is to organise the supervision and control of shipments of wastes in a way which takes account of the need to preserve, protect and improve the quality of the environment.

Based on the guiding principles of the Community's strategy on waste management, in particular prevention, recovery and final disposal, the Regulation lays down a series of rules which should enable the Community as a whole to dispose of its own waste and the Member States individually to move towards that goal, taking into account geographical circumstances and the need for specialised installations to handle certain types of waste.

The Regulation has introduced a number of measures for achieving control of the shipments of waste within, out of and into the Community. In particular:

- it establishes common definitions and terminology concerning shipments of waste;
- it lays down rules for the export, import, and transit of wastes for disposal or recovery;
- it specifies the information which the Member States and the Commission must supply.

Article 41 of the Regulation lays down that:

- (1) "Before the end of each calendar year, Member States shall draw up a report in accordance with Article 13(3) of the Basel Convention and send it to the Secretariat of the Basel Convention and a copy hereof to the Commission.
- (2) The Commission shall, based on these reports, establish every three years a report on the implementation of this Regulation by the Community and its Member States. It may request to this end additional information in accordance with Article 6 of Directive 91/692/EEC."

Pursuant to their obligation, most of the Member States have sent annual reports to the Commission on the supervision and control of shipments of waste. Table 1 in the Annex shows a list of the Member States who submitted the Basel Convention report to the

¹ Of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community, OJ L 30, 6.2.1993, p.1, last amended by Commission Regulation (EC) No 2557/2001 of 28 December 2001, OJ L 349, 31.12.2001, p. 1.

Commission. This table does not reflect, however, to which extent the questionnaire was filled in. Not every country has given all the information that was required.

The questionnaire of the Basel Convention Secretariat includes questions on legal provisions, implementation, and measures of environmental protection. Triennially, the Commission must draw up a report containing the information supplied by the Member States. The report should make it possible to assess the extent to which the transboundary shipment of wastes is being controlled throughout the Community. In this case, data for the year 2000 have also been included where available. The delay in delivering this report is due to the fact that information from some Member States arrived very late, and to a concentration of human resources in the Commission on the legislative revision of the Waste Shipment Regulation during the years 2002-2004.

On the basis of Article 41(2), the Commission in 1999 adopted a Decision² requiring additional information to be supplied by Member States in the form of a questionnaire. The first such reports should have covered data for the year 2000. Information from that source has not yet been integrated in this Commission Report but will be in the following one.

It should be noted that the Basel Convention uses the terms “import” and “export” for every shipment in and out of an individual country that is Party to the Convention, whereas under EU law these terms apply only to shipments in and out of the European Union as a whole. Shipments from one EU Member State to another will therefore not be called “import” and “export” in the main part of this report. They do, however, appear in the Annexes in the sense as used in the Basel Convention where they refer to the headings of the Basel Convention questionnaire.

Furthermore, it should be taken into account that the Waste Shipment Regulation and the Basel Convention have differing systems of waste classification, so that the definitions of hazardous waste and the types of waste that are subject to notification procedures are not quite the same. The data received from Member States pursuant to the Basel Convention should therefore not be taken as information geared to the purposes of the Waste Shipment Regulation. They will be used in this report to sum up the main trends in generation, treatment, and transboundary shipment of hazardous waste and other waste in the EU Member States for the given period.

In some cases, where data from Member States were corrected in later reports, this was taken into account. Where a Member State had not sent the required information to the Commission, the gaps were filled, as far as possible and appropriate, with data from the study on “Global Trends” published by the Secretariat of the Basel Convention in 2002³, and from the statistics of Eurostat.⁴ This has remained the exception, however, as the database of Eurostat is similarly incomplete and focuses on different aspects, particularly the economic added value of waste. The present Summary Report presents the essential results of the quantitative data that were reported on the shipment of waste to and from the EU Member States. This comprises data on generation, import, export, and treatment of hazardous waste and other waste. In order to keep the Report itself brief and facilitate its distribution, all data tables and figures are to be found in Annex A.

² Commission Decision 1999/412/EC of 3 June 1999, OJ L 156, 23.6.1999, p. 37.

³ Basel Convention, Global Trends in Generation and Transboundary Movements of Hazardous Wastes and Other Wastes, November 2002 (Basel Convention series/SBC No. 02/14).

⁴ European Commission (Eurostat), Waste generated and treated in Europe. Data 1990-2001, 2003.

Annex B contains the information on implementation and compliance with the Basel Convention and the Waste Shipment Regulation. This part will not present all replies submitted to the Basel Convention Secretariat by the Member States, as they often describe the same legal or factual situation. This is especially the case for questions covered by EU legislation where the rules are more or less identical for all Member States. In these cases a general reference to the EU Regulation is made.

2. GENERATION OF HAZARDOUS WASTES

In the Basel Convention questionnaires for the years 1997-2000 all countries were asked to provide information on the total amount of hazardous wastes and “other wastes” generated in the respective year. “Other wastes” in this context means wastes collected from households, and residues arising from the incineration of household wastes, two categories of wastes requiring special consideration and being subject to similar controls as hazardous wastes under the Basel Convention (they are known as entries Y46 and Y47, respectively). Hazardous wastes are defined according to a list of waste streams and/or constituents (Annex I to the Convention, entries Y1-18 and Y19-45, respectively)⁵ and certain hazard characteristics (Annex III). However, if waste is considered as hazardous by the domestic legislation of an export, import or transit state, it also falls under that definition for the purposes of the Convention.

14 Member States have supplied information on total generation of hazardous waste for one or more years in their reports to the Commission while the data for Luxembourg had to be supplemented from the statistics of the Basel Convention Secretariat. The data on waste generation provided by Member States in their reports were, however, in most cases fragmentary, and few countries could present unbroken timelines (cf. Annex A, Figures 1 and 2).

According to these reports, Germany had the largest quantities of hazardous waste (13-15 million tonnes per year), while the UK, Spain and France came next between 2.6 and 6.3 million tonnes). In terms of waste generation per capita, Germany, the Netherlands and Belgium were at the top of the list, whereas the lowest quantities were recorded in Greece, Portugal and France (cf. Annex A, Figure 2).

The available data for the years under review indicate an increase of about 10 % in the amount of hazardous waste generated within the Community as a whole, from ca. 36 million tonnes in 1997 to just over 40 million tonnes in 2000. This is mirrored by developments in some Member States, such as Germany, France, Italy and Spain, whereas the quantity of hazardous waste has risen more significantly in the United Kingdom, Finland and Austria. Such developments do not necessarily, however, reflect a real growth of waste production, but are related also to changes in the national definition or lists of hazardous waste (e.g. for Austria in 1998). In the Netherlands, after a marked increase between 1994 and 1997, the generation of hazardous waste has dropped to some extent in the following years.

As regards the categories of hazardous waste according to the Y-codes used by the Basel Convention, information was supplied by only 9 Member States. Wastes collected from households (Y46) and residues arising from the incineration of household wastes (Y47)

⁵ See Annex D to this Report.

represented the major part of the waste reported. They were also the only non-hazardous waste types reported to the Commission in accordance with the Waste Shipment Regulation. The Netherlands stated in their report that waste quantities corresponding to about 20% of the total amount were contaminated soil and another 15-20% ship-cleaning waste.

3. SHIPMENT OF HAZARDOUS WASTES OUT OF MEMBER STATES

Not all Member States of the European Union have sufficient capacity to deal with all categories of waste generated on their territory. Some specific waste streams – including hazardous wastes – require specialised treatment facilities in order to ensure an environmentally sound recovery or disposal. Therefore, transboundary shipment of hazardous waste between the EU Member States is not only an environmental issue, but reflects the fact that European waste management systems have reached an advanced level, which includes cooperation between Member States on treatment of specific waste streams. All Member States have submitted information on outbound shipment (“exports” in the Basel sense) of hazardous waste for at least two years within the period 1997-2000 (see Annex A, Table 5). By adding the figures and extrapolating some data it was possible to estimate the trend in hazardous waste shipment out of Member States in 1997-2000. The quantity more than doubled from about 2.6 million tonnes in 1997 to 5.4 million tonnes in 2000. A particularly sharp rise took place from 1999 to 2000.

The biggest “exporters” of such waste were Germany, Belgium and the Netherlands. Nearly $\frac{3}{4}$ of the waste shipped out of Member States in 1999 originated from one of these three countries. Shipment out of the UK, Spain and France was, according to the figures, among the lowest in the EU.

The same is true for the outbound shipment of waste in kg per capita: Among the six countries with the lowest “export” per capita were the UK, Spain, Italy and France (cf. Annex A, Table 6). At the other end of the scale, Luxembourg, the Netherlands and Belgium had the largest quantities of waste per capita moved across borders. This indicates that smaller countries ship more of their hazardous waste abroad as they do not have the same coverage of treatment facilities on their territory as the larger countries.

Concerning the share of hazardous waste that was shipped for treatment to other countries - mostly neighbouring Member States -, the calculated figures vary between 0 and 25 % (Annex A, Figure 6). The percentage was highest in Denmark, the Netherlands, and Portugal, which is comprehensible in the sense that they are all smaller countries without possibility to establish treatment capacity for all hazardous waste types inside their own borders. The percentage of waste shipped abroad was low in the UK, Greece and Spain. In this context it should be stressed that there are considerable uncertainties involved with the data because they were calculated combining Member States’ reported figures on generation and export, respectively, which are not necessarily compatible.

The information on notified shipments of “other waste” in the sense of the Basel Convention did not show large amounts of such waste - mixed household waste and incineration residues - being moved from Member States to other countries in the relevant period. Only the Netherlands, Denmark and Portugal reported shipments in this category amounting to more than 10 % of the quantity of hazardous waste indicated for any given year (Annex A, Table 8).

As regards the categories of hazardous waste in terms of the Y-codes under the Basel Convention, it must be pointed out that many Member States did not specify these categories (see Annex A, Figure 9: “unknown”) or used a mixture of Y-codes (“mix”). The reason for this is partly that Member States registered hazardous waste according to OECD codes without necessarily using Y-codes too. Another reason is that some of the wastes reported do not have a Y-code because they are not covered by the Basel Convention.

In the Annex (A, Figure 10), data were added from 10 Member States with information on outbound waste shipments assigned to Y-codes. It is noticeable that the considerable rise in tonnage shipped across borders from 1997 to 2000 was to a large degree due to “unknown” waste without Y-codes. Prominent among these are, for example, mixed wood waste shipped from Germany to Italy and waste from the production of iron and steel transported from Germany to France.

The major part of the hazardous waste and other waste shipped out of Member States in the years under review was treated in some kind of recovery operation. In 2000, about 4.5 million tonnes of waste (more than 80%) from 10 countries were recovered in this way (cf. Annex A, Figure 11). By absolute numbers, this fraction more than doubled since 1997. The shipments of waste for disposal out of Member States also doubled in the same period, but at a much lower level – from 400,000 tonnes to 900,000 tonnes.

The data collected show huge differences between Member States in the percentage of outbound waste shipments destined for recovery or disposal (see Annex A, Figure 12). From countries like Austria, Belgium, Finland, France, Germany, Greece, Luxembourg, the Netherlands and the UK more than 70% of the waste shipped abroad went to recovery facilities, while at the other end of the scale the share was only 10% in Portugal. In a middle group, consisting of Denmark, Ireland, Italy, Spain and Sweden, the share of waste shipments for recovery lay between 40 and 60%.

It is not possible to draw conclusions on the waste management systems in the countries only by looking at the share of exported waste going to recovery and disposal, as most of the waste in question was treated in the same country in which it was generated (cf. Annex A, Figure 6).

The EU Waste Shipment Regulation states that Member States are allowed to export hazardous waste only to a limited group of countries. Hazardous waste for recovery may be exported to all countries to which the OECD Decision⁶ applies. The initial possibility to export also to other countries which are Parties of the Basel Convention, or with which Member States have concluded bilateral agreements, was abolished by the entry into force of the so-called “Basel ban” on 1 January 1998. Waste for disposal may even be shipped only to other EU Member States and EFTA countries (Norway, Switzerland, Iceland and Liechtenstein). Thus, exports of waste for disposal to non-EU/EFTA countries and of hazardous waste for recovery to non-OECD countries are prohibited under the Waste Shipment Regulation.

In their reports to the Basel Secretariat the EU Member States provide information on the country of destination for exported hazardous waste. According to these reports, the increasing quantities of hazardous waste and other waste shipped across borders from 1997-

⁶ Decision C(92)39/FINAL of the OECD Council of 30 March 1992 on the control of transfrontier movements of wastes destined for recovery operations; later replaced by OECD Decision C(2001)107/FINAL of 14 June 2001.

2000 went in their large majority to other EU Member States. In 1997 the percentage was 84%, rising to 91% in the year 2000 (see Annex A, Figures 13 and 14). This means that Member States increasingly followed the principles of proximity and self-sufficiency with regard to the disposal and recovery of hazardous and other notified wastes. The percentage of waste exported to countries outside EU/EFTA decreased from 11% in 1997 to 5% in 2000.

The countries exporting waste to non-OECD countries in 2000 were Germany, Italy and the Netherlands. In the case of Germany, this concerned primarily various kinds of packaging materials for recovery, Italy exported mixed household waste, and the Netherlands specified their waste export as Y18 and Y23, mixed household waste and plastic waste. Export of these waste types to non-OECD countries, if properly notified, are not illegal according to the Shipment Regulation.

4. SHIPMENT OF HAZARDOUS WASTES INTO MEMBER STATES

As part of their reports to the Basel Convention Secretariat, all Member States have submitted information on the import of hazardous waste for one or more years within the period 1997-2000 (see Annex A, Table 16). Although the data are not quite complete, it is possible to estimate the overall trend of hazardous waste shipping into Member States for the given period: In parallel to the development of shipments out of Member States, the quantity of hazardous waste shipped in the other direction has more than doubled from about 2.3 million tonnes in 1997 to 5.2 million tonnes in 2000. Most of this increase again took place between 1999 and 2000. The figures are very similar to those for the “exports” of waste, indicating that the major part of the shipments took place between Member States.

The EU countries with the largest quantities of waste taken from abroad were Germany, Italy, Belgium, France and the Netherlands. Their share of the total waste shipped to EU Member States rose from 82% in 1997 to 88% in 1999 and 2000. Germany, Italy and Belgium alone accounted for 50% of total “imports” in 1997 and 67% in 2000. The countries with the lowest volume of inbound shipments were Ireland, Portugal and Greece.

Looking at the shipments of waste per capita to Member States, the numbers tend to be higher in small countries than in big ones (cf. Annex A, Figure 16). The reason for this may be that the treatment facilities for hazardous waste in small countries are more dependent on import of waste from other countries, due to the limited size of their home market.

The shipment into Member States of mixed household waste and incineration residues (“other waste” in the sense of the Basel Convention) generally did not add much to the amount of hazardous waste that was moved in the same period. Only Germany and the Netherlands reported significant “imports” of such waste, which in some years nearly equalled the quantities of hazardous waste that entered these countries from abroad (cf. Annex A, Tables 16 and 18). Mixed household waste originated in both cases mainly from Belgium, while incineration residues shipped to Germany came also from several other neighbouring countries, especially the Netherlands, Switzerland and Denmark.

Concerning the categories of hazardous waste shipped to Member States according to Y-codes, it must again be pointed out that for a large part of the waste no Y-code was declared (see Annex A, Figure 19: “unknown”) or the waste was placed in a group of mixed Y-codes (“mix”). The data from the 10 Member States with more precise Y-code information (Austria, Belgium, Denmark, Finland, France, Germany, the Netherlands, Spain, Sweden, and the

United Kingdom) show that in the period 1997 to 2000 the largest increase took place in the group of “unknown” waste. In 2000, almost half of the waste was not assigned to Y-codes. The German report for that year mentions as the largest single waste streams in this category construction and demolition waste from Luxembourg, and mixed wood waste and agricultural waste from the Netherlands. Belgium does not specify which type of waste is meant here, but only indicates that the waste went to various kinds of recovery and disposal operations, including landfill and incineration. In Italy the main waste stream received - much larger than any of the Y-listed categories - was treated waste wood from Germany, Switzerland and the Benelux countries.

The major part of the hazardous waste and other waste shipped into Member States was treated in recovery operations. About 4 million tonnes of waste (or 80%) from the 10 countries which supplied specific Y-code information were recovered in 2000 (Annex A, Figure 21). This is more than twice the amount in 1997. The inbound shipments of hazardous waste for disposal also doubled in the same period, but at a much lower level – from 400,000 tonnes to 900,000 tonnes.

The available data show some variations between Member States as regards the percentage of waste taken in for recovery or for disposal. In Belgium, Denmark, the Netherlands, Portugal, Sweden and the UK more than 80% of the waste coming from abroad was destined for recovery, while it was about 60% in Austria and Spain, and apparently less than 20% in Luxembourg (cf. Annex A, Figure 22). For Luxembourg this may be due to the fact that the main treatment facility there is an incineration plant for municipal waste.

The Waste Shipment Regulation allows Member States to import waste only from a limited group of countries. Waste for recovery may be imported from all countries that are members of the OECD or Parties to the Basel Convention or with which multi- or bilateral agreements have been concluded. Waste for disposal may be imported into the Community from EFTA countries (Norway, Switzerland, Iceland and Liechtenstein), other countries that are Parties to the Basel Convention or for which multi- or bilateral agreements exist. Thus, there are restrictions of waste imports into the Community, but they are far less strict than those on exports.

In their reports to the Basel Convention Secretariat, the Member States have provided information on the country of origin of the imported hazardous waste. According to these reports, 88-90% of the hazardous waste shipped to Member States within the period 1997-2000 came from other Member States (cf. Annex A, Figures 23 and 24). The percentage of waste imported from countries outside EU/EFTA was about 3-4%.

In 2000 Denmark, Portugal and Ireland were the only Member States that did not import waste from non-OECD countries.

5. SUMMARY

On the basis of the reports received from the Member States the following conclusions can be reached:

- Member States have generally submitted sufficient information in respect to types of waste treatment and country of origin/destination. However, data were fragmentary concerning

waste categories and total generation of hazardous waste. This has to be taken into account when interpreting the data in the Annex to this Report.

- The quantities of hazardous waste generated in the Community as a whole increased by about 10 % between 1997 and 2000, reaching a level of about 40 million tonnes per year. Part of this, however, is due to changes in the national definition of hazardous waste.
- Only a minor part of the total hazardous waste generated in the Member States was shipped across borders – between 0 and 25%. The main part was treated inside the country.
- Shipments in and out of Member States nevertheless increased rapidly in the years under review. The quantity of “exports” more than doubled from about 2.6 million tonnes in 1997 to 5.4 million tonnes in 2000, with a parallel rise in “imports” from 2.3 to 5.2 million tonnes.
- About 90% of the hazardous waste shipped into Member States originated from other Member States. Accordingly, 90% of the waste shipped across borders went to other Member States.
- More than 80% of the hazardous waste shipped in or out of Member States was destined to recovery operations.