



A R G U S

**Implementation of Directive
2000/53/EU on end-of-life
vehicles (the ELV Directive)
with emphasis on the end-of-
life vehicles with unknown
whereabouts**

Summary report on the
implementation of the ELV Directive
for the periods 2008-2011 and 2011-
2014 (“Lot 2”)

Contract No. 07.0201/2015/723374/ETU/ENV.A.2

ARGUS – Statistics and Information Systems in
Environment and Public Health GmbH

Berlin, 07 November 2016

Contents

1	Introduction	4
2	Objectives and scope of the study.....	4
3	Methodological approach	5
4	Assessment of completeness	6
5	Assessment of transposition (part I).....	7
5.1	Agreements according to Article 10(3) (1.2, 1.3)	7
5.2	Exemptions pursuant to Article 3(3) (1.4)	8
5.3	Prevention measures pursuant to Article 4(1) (1.5)	8
5.4	Transposition of Annex II from the ELV Directive pursuant to Article 4(2) (1.6)	9
5.5	Collection system setup pursuant to Article 5(1) (1.7)	10
5.6	Transfer of ELVs to ATF pursuant to Article 5(2) (1.8)	10
5.7	CoDs and deregistration of ELVs pursuant to Article 5(3) (1.9)	11
5.8	Transposition of producer responsibility with regard to treatment costs pursuant to Article 5(4) (1.10)	14
5.9	Mutual recognition of CoDs among Member States pursuant to Article 5(5) (1.11)	15
5.10	Storage and treatment in compliance with minimal requirements set out in Annex I, pursuant to Article 6(1) (1.12)	16
5.11	Permits and registration of ATF pursuant to Article 6(2) (1.13)	16
5.12	Minimum requirements for ATF pursuant to Article 6(3) and Annex I (1.14)	17
5.13	Minimum content of permits pursuant Article 6(4) (1.15).....	18
5.14	Introduction of certified environmental management systems pursuant to Article 6(5) (1.16)	18
5.15	Compliance with waste hierarchy pursuant to Article 7(1) (1.17)	19
5.16	Establishment of reuse, recycling and recovery targets pursuant to Article 7(2) (1.18).....	20
5.17	Use of component and material coding standards pursuant to Article 8(1) (1.19)	21
5.18	Provision of dismantling information for new vehicles pursuant to Article 8(3) (1.20)	21
5.19	Provision of information concerning dismantling, storage and testing from component manufacturers pursuant to Article 8(4) (1.21)	22
5.20	Publication of information on the recoverability, recyclability and environmentally sound treatment of ELVs by economic operators pursuant to Article 9(2) (1.22).....	22
6	Assessment of Implementation (part II).....	23
6.1	New measures to prevent the use of hazardous substances (2.1)	23
6.2	Quantities of recycled materials and market situation for recycled materials (2.2)	26
6.3	Number of vehicles collected and transferred to authorised treatment facilities (2.3)	29
6.4	Number of authorised or registered treatment facilities (2.4)	31
6.5	Number of ELVs with no or with a negative market value (2.5).....	34
6.6	Number of treatment establishments or undertakings with certified environmental management system (2.6)	36
6.7	New measures to encourage reuse and recovery of components (2.7)	38
6.8	Reuse, recycling and recovery rates achieved (2.8).....	39
6.9	Information from producers concerning ELV dismantling, storage and testing (2.9).....	42
6.10	Structural changes of the vehicle market or the treatment industries; distortion to competition (2.10)	43
7	Unknown whereabouts of ELVs	47
8	Summary and Conclusions.....	49

List of figures

Figure 1: Achieved reuse/recycling and reuse/recovery rate by country for reference year 2013	40
---	----

List of tables

Table 1: Actions taken against Member States for delayed transposition of Annex II revisions	10
Table 2: Number of vehicles collected and transferred to authorised treatment facilities	30
Table 3: Number of vehicles collected and transferred to authorised treatment facilities in each MS, per 1 000 inhabitants	31
Table 4: Number of authorised and registered treatment facilities (ATF) in EU Member States	33
Table 5: Number of ELVs with positive/negative market value reported by Denmark.....	34
Table 6: Number of ELVs with positive/negative market value reported by Croatia.....	34
Table 7: Number of ELVs with no or negative market value reported by Lithuania.....	35
Table 8: Number of ELVs with no or negative market value reported by Malta.....	35
Table 9: Number of (incomplete) ELVs with no or negative market value reported by Poland	35
Table 10: Number of treatment establishments with certified environmental management systems	37
Table 11: Reuse/recycling rates (%) achieved per Member State in the period 2008-2013	41
Table 12: Reuse/recovery rates (%) achieved per Member State in the period 2008-2013	42
Table 13: Vehicles brought into Poland and new vehicles sold, as reported by Poland	45

1 Introduction

Article 9 of the ELV Directive obliges Member States to send a report on the implementation of this Directive to the Commission in three-year intervals, on the basis of a questionnaire established by Commission Decision 2001/753/EC¹. The questionnaire consists of two parts: the first part concerns details on the incorporation of the Directive into national law; the second part, information on the actual implementation of the ELV Directive.

On the basis of the information provided by Member States, the Commission prepares a three-year implementation report of the Directive. The first implementation report², which covered the period from 21 April 2002 to 21 April 2005, was published in 2007; the second implementation report³ covering the period from 21 April 2005 to 21 April 2008 was published in 2010. The third report will be published for the two last reporting periods from 21 April 2008 to 21 April 2011 and from 21 April 2011 to 21 April 2014.

2 Objectives and scope of the study

The current study aims to:

- assess the national reports for the period 2011-2014;
- provide a general assessment of the implementation of the ELV Directive on the basis of the reports for the two reporting periods 2008-2011 and 2011-2014;
- prepare a draft of the Commission's report to the European Parliament and Council covering both reporting periods.

The analysis of **Part 1 'Incorporation into national law'** of the implementation reports primarily seeks to provide the information basis for the Commission's implementation report to the European Parliament and the Council. Therefore, the work focusses on identifying and documenting changes in the legal transposition of the ELV Directive that took place in Member States during the two reporting periods that are being assessed.

It is not the aim of this report to assess whether the Member States have transposed Directive 2000/53/EC correctly. The Commission assesses conformity to national legislation and agreements with the Directive 2000/53/EC through conformity checks, carried out in the years 2004 and 2007. Furthermore, cases of presumed non-conformity of national legislation have been subject to infringement procedures. This work does not aim at a detailed description of the way the countries have transposed the Directive or at the assessment whether the transposition is correct.

The analysis of **Part II 'Implementation of the Directive'** aims to extract and summarise all relevant information concerning the implementation of the Directive 'on the ground' and the encountered problems. Particular attention is paid to information that concerns the unknown whereabouts of end-of-life vehicles and related questions like the issuing of CoDs and illegal dismantling of ELVs.

This report, referred to as the 'Summary implementation report', summarises the assessment of the national implementation reports for the period 2008-2014 and will be the basis for the draft Commission implementation report for the respective period. The draft Commission report is submitted as a separate document.

¹ OJ L 282, 26.10.2001, p. 77

² [COM/2007/0618 final](#)

³ [COM/2009/635 final](#)

3 Methodological approach

In the first step, the national implementation reports were checked for completeness. The exercise also covered data submitted for compliance monitoring pursuant to Decision 2005/293/EC⁴. The respective information is summarised in chapter 5.

Assessment of Part I 'Incorporation into national legislation':

For each question the Member States' responses for the two reporting periods in 2008-2014 were checked and compared to the information available from previous reporting periods to identify changes. The following sources were used:

- for the period 2008-2014:
 - National implementation reports for the periods 2008-2011 and 2011-2014;
 - The study "Implementation report for the ELV Directive" for the reporting period 2008-2011⁵ (Bio Intelligence Study 2012, on behalf of DG Environment); and
 - Information on infringement procedures, where relevant.
- previous reporting periods (2002-2008):
 - First Commission implementation report for the period 2002-2005 (including the comprehensive Annex to the report) and
 - Second Commission implementation report for the period 2008-2011.

Identified changes in transposition were documented separately for each question. For some countries, part 1 assessments were hampered for the following reasons:

- Some countries did not directly answer the questions but instead referenced earlier implementation reports or other documents (e.g. direct communication with the Commission) and
- Comparing responses and information with the previous reporting period 2005-2008 was limited by the fact that the 2nd Commission Report does not cover all countries but was instead based on information from only 22 Member States (Member States not covered: Ireland, Spain, Malta, Romania, Slovenia).

Results from the assessment on legal transposition (part 1 of the implementation reports) are presented in chapter 5 of this report.

Assessment of Part 2 'Implementation':

Part II of the implementation questionnaire contains different types of questions, addressing:

1. New measures concerning waste prevention and the implementation of the waste hierarchy;
2. Developments with regard to the use of recyclables, the vehicle market, market distortions, etc.; and
3. Achieved rates, treated cars and the number of authorised treatment facilities.

For types 1 and 2, Member State information was extracted and summarised separately for each question.

For the third question type, the data were extracted, presented in tables or graphs and compared to data from compliance monitoring, where appropriate.

Certain questions ask for data that are also collected in the frame of the compliance monitoring:

Question 2.3: Number of vehicles collected and transferred to authorised treatment facilities;

⁴ OJ L 94, 13.4.2005, p. 30

⁵ Bio Intelligence 2012; study on behalf of European Commission, DG Environment

Question 2.8: Rates of vehicle reuse, recycling and recovery attained.

For these two questions, the data from implementation reports and from compliance monitoring were compared and checked for serious and/or systematic differences. The comparison showed that there are no systematic differences. Existing deviations between the data sets are limited in number and generally rather small. When deviations were found, data from compliance monitoring were used because they are reported and validated in a systematic and well-established way and therefore assumed to be more reliable.

The 25 April 2016 data from compliance monitoring were downloaded from Eurobase for the analysis. For further background information on the data, the validation report for reference year 2013 was used.

The results about the assessment of part 2 in the implementation reports are presented in chapter 6 of this report.

4 Assessment of completeness

Implementation reports

For the period 2011-2014, reports were missing from **Spain** and the **Netherlands**. **Greece** and **Finland** delivered their reports with considerable delay in April 2016 (reporting deadline was 30 September 2015).

For the period 2008-2011, implementation reports were submitted by **all Member States**.

The information provided is mostly complete, although the quality of information varies considerably.

The preliminary remark in the Implementation Questionnaire states that “there is no need to repeat information already supplied, but please indicate where and when that information was provided”. Some countries followed this instruction strictly (e.g. Portugal) or partially (e.g. Finland, Hungary). In these cases the countries reference the document in which the respective information was provided. This may be an earlier implementation report, communication with the Commission or communication with consultants during the assessment of the previous reporting period. This procedure is formally correct but may hamper the assessment or render it more time-consuming as the information may not (easily) be available.

Some countries update the answers in the implementation reports selectively for some questions. This is in principle reasonable but may lead to some answers remaining unchanged over several reporting periods. For the reader, it is often not visible if an answer was not changed because the information is still valid or for other reasons. For questions addressing implementation, it remains unclear whether a described situation or problem still exists or whether the information was simply not updated.

Compliance monitoring

The deadline for submitting the monitoring data pursuant to Decision 2005/293/EC is 18 months after the end of the relevant year. Accordingly, the data for reference year 2013 were due by the end of June 2015 and should currently be available, whereas the data for 2014 will only be delivered by the end of June 2016.

Data for reference year 2013 are currently available from 26 of the 28 Member States; data from Romania and Slovenia is still missing. The data are complete for all previous years of the considered time period.

The data validation report⁶ for the 2013 data indicates that data delivery punctuality is not satisfying and significantly delays data publication and efficient evaluation. For the reference year 2013, fifteen

⁶ Validation report on data on ELV recycling and recovery for reference year 2013 (Eurostat report; not published)

countries reported on time, five countries reported within four weeks after the deadline and eight countries were more than four weeks late.

The monitoring data are shown in chapters 6.3 and 6.8 in the context of the respective questions.

5 Assessment of transposition (part I)

This chapter shares the results from the assessment of part 1 of the implementation reports, which addresses the legal transposition of Directive 2000/53/EC. Results are presented in the order of the implementation questionnaire (Annex to Decision 2001/753/EC).

The number of the question to which the following chapters refer is added to the headline in brackets.

5.1 Agreements according to Article 10(3) (1.2, 1.3)

Article 10.3

Provided that the objectives set out in this Directive are achieved, Member States may transpose the provisions set out in Articles 4(1), 5(1), 7(1), 8(1), 8(3) and 9(2) and specify the detailed rules of implementation of Article 5(4) by means of agreements between the competent authorities and the economic sectors concerned. (..)

Questions

- 1.2. *Has the Member State transposed any provision listed in Article 10(3) by means of agreements between the competent authorities and the economic sector concerned? (Yes/No)*
- 1.3. *If the answer to question 1.2 is 'Yes', please provide details.*

The following five countries reported that they had transposed provisions of the Directive by means of agreements: **Belgium, Italy, Luxembourg, Malta** and **Hungary**.

Belgium has established agreements in all three regions:

In the **Brussels region**, the Environmental Policy Agreement of 18 January 2012 includes measures to transpose Articles 4(1), 5(1), 7(1), 8(3) and a part of the article 9(2). It also specifies the measures taken in accordance with Article 5(4). The Agreement will apply for five years. It replaced the Environmental agreement of 19 April 2005.

In the **Flemish region**, the most recent environmental policy agreement of 17 December 2010 came into force on 1 August 2011. The Agreement contains measures transposing Article 4(1), 5(1), 7(1), 8(3) and parts of Article 9(2), and specifies the application of Article 5(4).

In the **Walloon region**, the Environmental Convention of 5 December 2013, which was published on 30 June 2014, replaced the Environmental Convention on ELV management from 19 April 2004, which expired in July 2009.

The revisions and adaptations of the regional agreements in Belgium were related to a non-conformity infringement procedure involving a referral to Court in 2010 that the Commission had already started in 2005 and was closed in 2012.

In **Italy**, the objectives of the agreements with economic operators are, amongst others, to establish collection systems and organise a network of evenly distributed collection centres, develop energy recovery from materials which cannot be reused or recycled, and create an IT system to monitor flows of end-of-life vehicles and related materials.

Hungary seems to have newly introduced an agreement in the reporting period 2011 to 2014 but did not provide any further information.

Luxembourg signed an agreement with the economic operators on 15 March 2016.

Malta did not provide further information.

5.2 Exemptions pursuant to Article 3(3) (1.4)

Article 3(3)

Where a producer only makes or imports vehicles that are exempt from Directive 70/156/EEC by virtue of Article 8(2)(a) thereof, Member States may exempt that producer and his vehicles from Articles 7(4), 8 and 9 of this Directive.

Questions

1.4. *Has any producer and his vehicles been exempted from Articles 7(4), 8 and 9, pursuant to the exemption possibility allowed under Article 3(3) of Directive 2000/53/EC? (Yes/No)*

1.4.1. *If the answer to 1.4 is 'Yes', please provide details.*

Only the two Member States **Ireland** and the **United Kingdom** exempted vehicles produced in small series and their producers from the requirements addressing reusability, recyclability and recoverability, coding standards and dismantling information as well as reporting obligations.

Lithuania seems to have abolished an exemption according to Article 3(3) in the reporting period 2011-2014 but did not provide any further information.

5.3 Prevention measures pursuant to Article 4(1) (1.5)

Article 4(1)

In order to promote the prevention of waste Member States shall encourage, in particular:

(a) vehicle manufacturers, in liaison with material and equipment manufacturers, to limit the use of hazardous substances in vehicles and to reduce them as far as possible from the conception of the vehicle onwards, so as in particular to prevent their release into the environment, make recycling easier, and avoid the need to dispose of hazardous waste;

(b) the design and production of new vehicles which take into full account and facilitate the dismantling, reuse and recovery, in particular the recycling, of end-of life vehicles, their components and materials;

(c) vehicle manufacturers, in liaison with material and equipment manufacturers, to integrate an increasing quantity of recycled material in vehicles and other products, in order to develop the markets for recycled materials.

Questions

1.5. *Have the necessary measures pursuant to Article 4(1) been taken? (Yes/No)*

1.5.1. *If the answer to 1.5 is 'Yes', please provide details.*

1.5.2. *If the answer to 1.5 is 'No', please state the reasons why.*

The Article 4(1) provisions were established already by all 22 responding Member States in the reporting period 2005-2008.

For the period 2008-2014, all Member States except **Greece** confirmed that the required measures were established. Greece argued that measures pursuant to Article 4(1) are unnecessary because all cars in Greece are imported and none produced. Hence, all 'producers', according to the definition of the Council Directive 2000/53, are implicitly car importers.

5.4 Transposition of Annex II from the ELV Directive pursuant to Article 4(2) (1.6)

Article 4(2)

(a) Member States shall ensure that materials and components of vehicles put on the market after 1 July 2003 do not contain lead, mercury, cadmium or hexavalent chromium other than in cases listed in Annex II under the conditions specified therein;

(b) Annex II shall be amended on a regular basis, according to technical and scientific progress (...).

Questions

1.6. *Have the necessary measures pursuant to Article 4(2)(a) been taken? (Yes/No)*

1.6.1. *If the answer to 1.6 is 'Yes', please provide details.*

1.6.2. *If the answer to 1.6 is 'No', please state the reasons why.*

For the period 2005-2008, the second Commission report states that, in 22 countries, national legislation restricts the use of lead, mercury, cadmium or hexavalent chromium for materials and components of vehicles put on the market after 1 July 2003, apart from the exemptions listed in Annex II.

For the period 2008-2014, all Member States except Greece confirmed having transposed the required provisions. Greece argued that there is no need to take measures pursuant to Article 4(2) because in Greece all cars are imported and none produced.

Complying with Article 4(2) requires timely integrating the amendments to Annex II of Directive 2000/53/EC into national legislation. In the period from 2008 to 2014, Annex II was revised four times, starting with the third revision in 2008 and ending with a sixth revision in 2013. For the fifth revision in 2011 and the sixth revision, transposition periods of nine months and three months respectively were set in the amending Directives.

Numerous countries failed to transpose these last two revisions on time. The Commission took actions against 12 Member States for delayed transposition of the fifth revision and against 16 Member States for the sixth revision (see Table 1). The last case (action against Romania) was closed in October 2015.

The Commission acted against Greece for failure to transpose Annex II in January 2012. The case was closed in June 2012.

Table 1: Actions taken against Member States for delayed transposition of Annex II revisions

	Formal notice Article 258	Reasoned opinion	Referral to Court
Delayed transposition of Directive 2011/37/EU	AT, EL, ES, FI, FR, HU, MT, PL, UK	IT, RO, SK	
Delayed transposition of Directive 2013/28/EU	AT, BE, BG, CZ, DK, EE, ES, HU, IT, LT, LU, MT, SI, SK, UK		RO

5.5 Collection system setup pursuant to Article 5(1) (1.7)

Article 5(1)

Member States shall take the necessary measures to ensure:

- *that economic operators set up systems for the collection of all end-of life vehicles and, as far as technically feasible, of waste used parts removed when passenger cars are repaired,*
- *the adequate availability of collection facilities within their territory.*

Questions

- 1.7. *Have the necessary measures pursuant to Article 5(1) been taken? (Yes/No)*
- 1.7.1. *If the answer to 1.7 is 'Yes', please provide details.*
- 1.7.2. *If the answer to 1.7 is 'No', please state the reasons why.*

The second Commission Report states that for the period 2005-2008 “all respondents took the necessary measures to ensure that economic operators (...) set up systems for the collection of end-of-life vehicles and (as far as technically feasible) of waste used parts removed when passenger cars are repaired, and to ensure the adequate availability of collection facilities within their territory.”

All respondents took the necessary measures to comply with Article 5(1) requirements.

For the period 2008-2014, Member States answers in the implementation reports confirm that all Member States complied with Article 5(1) requirements. At least six countries (Belgium, France, Ireland, Lithuania, Romania and Slovenia) have included in the legislation minimum requirements for the adequate availability of collection facilities, either by defining a maximum distance to the next collection point or by setting a minimum number of collection points per city/region or per number of inhabitants.

In **Belgium**, the three regions have partly transposed Article 5(1) through agreements.

More information on the number and availability of collection points and treatment facilities in Member States is provided in chapter 6.4 where the Member States' information on the number of authorised treatment facilities is presented.

5.6 Transfer of ELVs to ATF pursuant to Article 5(2) (1.8)

Article 5(2)

Member States shall also take the necessary measures to ensure that all end-of life vehicles are transferred to authorised treatment facilities.

Questions

- 1.8. *Have the necessary measures pursuant to Article 5(2) been taken? (Yes/No)*
- 1.8.1. *If the answer to 1.8 is 'Yes', please provide details.*
- 1.8.2. *If the answer to 1.8 is 'No', please state the reasons why.*

All Member States confirmed that they have transposed the provisions of Article 5(2), which mandates that they shall ensure that all ELVs end up at authorised treatment facilities. No indications of remarkable changes were found during the reporting period.

To follow the article's provisions, Member States usually oblige ELV holders to hand over their ELVs to an ATF or to a collection point. Collection points/centres or other receivers then have to pass on the ELVs to an authorised treatment facility.

In **Italy**, ELV may also be returned to the dealer or to the producer's outlet.

5.7 CoDs and deregistration of ELVs pursuant to Article 5(3) (1.9)

Article 5(3)

Member States shall set up a system according to which the presentation of a certificate of destruction is a condition for deregistration of the end-of life vehicle. This certificate shall be issued to the holder and/or owner when the end-of life vehicle is transferred to a treatment facility. Treatment facilities, which have obtained a permit in accordance with Article 6, shall be permitted to issue a certificate of destruction. Member States may permit producers, dealers and collectors on behalf of an authorised treatment facility to issue certificates of destruction provided that they guarantee that the end-of life vehicle is transferred to an authorised treatment facility and provided that they are registered with public authorities.

Issuing the certificate of destruction by treatment facilities or dealers or collectors on behalf of an authorised treatment facility does not entitle them to claim any financial reimbursement, except in cases where this has been explicitly arranged by Member States.

Member States which do not have a deregistration system at the date of entry into force of this Directive shall set up a system according to which a certificate of destruction is notified to the relevant competent authority when the end-of life vehicle is transferred to a treatment facility and shall otherwise comply with the terms of this paragraph. Member States making use of this subparagraph shall inform the Commission of the reasons thereof.

Questions

- 1.9. *Have the necessary measures pursuant to Article 5(3) been taken? (Yes/No)*
- 1.9.1. *If the answer to 1.9 is 'Yes', please provide details.*
- 1.9.2. *If the answer to 1.9 is 'No', please state the reasons why.*
- 1.9.3. *Has the Member State made use of the clause under Article 5(3) allowing producers, dealers and collectors, on behalf of an authorised treatment facility, to issue certificates of destruction under the conditions specified therein? (Yes/No)*
- 1.9.3.1. *If the answer to 1.9.3 is 'Yes', please provide details.*
- 1.9.4. *Has the Member State made use of Article 5(3), last paragraph? (Yes/No)*
- 1.9.5. *If the answer to 1.9.4 is 'Yes', please provide details.*
- 1.9.6. *If the answer to 1.9.4 is 'Yes', has the Commission been informed thereof? (Yes/No)*

1.9.7. *If the answer to 1.9.6 is 'No', please state the reasons why.*

Question 1.9

All Member States except Belgium reported clearly that presentation of the CoD is a requirement for vehicle deregistration. **Ireland** and **Slovakia** did not clearly describe how the CoD is relevant for the deregistration process. In **Belgium**, the legal basis is prepared but not yet in force. Therefore, the last paragraph of Article 5(3) (regarding Member States which do not have a deregistration system) is followed until the new system is in place.

Portugal refers to the information provided in the national implementation report for the period 2005-2008 and the additional information submitted to the consultant BIO Intelligence Service on 17 September 2012. From this data source, it is clear that Portugal has a deregistration system and that an issued CoD is a condition for deregistration.

Question 1.9.3

Belgium, Cyprus, Czech Republic, Germany, Spain, France, Croatia, Hungary, Ireland (since 2007), **Luxembourg, Latvia** (since period 2011-2014), **Malta, the Netherlands** and the **United Kingdom** reported not using the clause under Article 5(3) that allows producers, dealers and collectors, on behalf of an authorised treatment facility, to issue certificates of destruction under the conditions specified therein.

All other countries reported some kind of possibility to transfer the obligation for issuing a CoD from the treatment facility to different operators (collection points, dealer, repair shop, etc.).

In **Austria**, producers, dealers or collectors can issue CoDs on behalf of authorised treatment facilities. There is an obligation for registering this process.

In **Bulgaria**, "the operator of the collection and temporary storage site issues the ELV dismantling certificate only on behalf of the dismantling centre operator".

Denmark, Sweden, Finland and **Hungary** only answered 'yes' to the question without adding other relevant information.

In **Estonia**, producers can issue CoDs when they have an agreement with a waste handler (dismantler) who has a waste permit and a hazardous waste handling license. Other economic operators like collectors or dealers cannot issue CoDs if they do not have a waste permit and a hazardous waste handling license.

Italy reported that the dealer or the manager of the manufacturer's outlet or car showroom may issue the vehicle holder a certificate of destruction on behalf of the authorised facility that will treat the vehicle. The certificate includes a commitment to deregister the vehicle with the PRA (Pubblico Registro Automobilistico), which is the body registering all the vehicles circulating in the country. The dealer (or similar) must perform the deregistration before delivering the ELV to a treatment centre together with the license plates, ownership certificate and logbook of ELV.

In **Lithuania**, a treatment facility may authorise another facility offering similar activities (e.g. vehicle repairs) to accept, on its behalf, the end-of-life vehicles and to issue a certificate of destruction. A copy of the contract should be submitted to the Regional Environmental Protection Department of the Ministry of the Environment of the Republic of Lithuania.

Under **Polish** legislation, CoDs may be issued not only by dismantling centre operators but also by vehicle collection point operators.

In **Romania**, a CoD can be issued by facilities authorised to collect ELVs. The certificate of destruction should be issued on behalf of the treatment facility with which the economic operator has a contract.

Slovenia reported that the CoD shall be issued by the manager of an authorised dismantling facility. It can also be issued by a collector at a collection point but only if authorised by the manager of an authorised dismantling facility.

In **Slovakia**, this obligation can be fulfilled by an individual collecting end-of-life vehicles instead of a treatment facility.

In **Greece**, the centralised collection system (AMVH) is organised by the producers. When an ELV enters an ATF or a collection point, this facility informs (by an electronic system) the AMVH and a CoD is issued.

Question 1.9.4

Belgium, Bulgaria, Cyprus, Denmark and Slovakia reported in question 1.9.4 that they employed the last paragraph of Article 5(3) concerning countries without a deregistration system. **Belgium** explained that the regions of Flanders and Brussels shall use this paragraph until the new registration system is in place. For the other four countries Bulgaria, Cyprus, Denmark and Slovakia, the answer to question 1.9.4 is not consistent with their statements under question 1.9 that a deregistration system is in place and instead seems to reflect a misunderstanding of question 1.9.4.

All other countries reported that they did not use this paragraph; some added that the reason for this is the presence of a deregistration system.

Summary

All Member States except Belgium report clearly that the presentation of a CoD is a requirement for deregistration of a vehicle. In Belgium, the provisions are implemented at the regional level and although federal legislation is in the process of being amended to include a national deregistration system, it is not yet in force. Therefore, the last paragraph of Article 5(3) (regarding Member States which do not have a deregistration system) is used until the new system is in place. Producers, dealers and collectors on behalf of an ATF are allowed to issue CoDs in 14 countries, while in the other 14 countries only ATFs can issue a CoD. In comparison to the last two reporting periods, the number of countries using this clause has increased; e.g. for the reporting period 2005-2008, only 9 countries used this clause.

According to the monitoring data of Commission Decision 2005/293/EC⁷, there are discrepancies between the number of CoDs issued and the number of deregistered ELVs. Such differences can, for instance, stem from the involvement of different national authorities for different "steps" (e.g. ministry of transport responsible for de-/registration but environmental agencies responsible for issuing CoDs) or can be related to the use of different definitions (e.g. in-/exclusion of stolen and exported/imported ELVs/vehicles).

In 2009, a non-conformity case⁸ was brought against France. Article 5(3) relating to the issue of a certificate of destruction of an end-of life vehicle had not been correctly reproduced in the French law, which could have created confusion, in particular for vehicle owners from other Member States. Addressing this, the Commission criticised specifically the fact that the certificate of destruction is delivered not at the time of the transfer of the vehicle but only after its physical destruction and that the certificate is delivered not to the holder of the end-of-life vehicle but to the prefect of the "département" where the vehicle was registered. The case was closed in 2011 after France had adapted its legislation.

⁷ Validation Report on data on ELV recycling and recovery for the reference year 2013; data status as of 18 December 2015

⁸ Commission of the European Communities vs French Republic; Case C-64/09; 2009/C 90/25

5.8 Transposition of producer responsibility with regard to treatment costs pursuant to Article 5(4) (1.10)

Article 5(4)

Member States shall take the necessary measures to ensure that the delivery of the vehicle to an authorised treatment facility in accordance with paragraph 3 occurs without any cost for the last holder and/or owner as a result of the vehicle's having no or a negative market value.

Member States shall take the necessary measures to ensure that producers meet all, or a significant part of, the costs of the implementation of this measure and/or take back end-of life vehicles under the same conditions as referred to in the first subparagraph.

*Member States may provide that the delivery of end-of life vehicles is not fully free of charge if the end-of life vehicle does not contain the essential components of a vehicle, in particular the engine and the coachwork, or contains waste which has been added to the end-of life vehicle.
(...)*

Questions

- 1.10. Have the necessary measures pursuant to Article 5(4) been taken? (Yes/No)
- 1.10.1. If the answer to 1.10 is 'Yes', please provide details, including detailed information corresponding to paragraphs 2 and 3 of Article 5(4).
- 1.10.2. If the answer to 1.10 is 'No', please state the reasons why.

All Member States without exception have transposed the provision that the delivery of the vehicle to an ATF has to occur without any costs for the last holder/owner.

France was the last country to comply with this provision after the Commission's action against France, which led to the CJEU judgement⁹ of 15 April 2010. In its action, brought on 13 February 2009, the Commission criticised "*the implementation of Article 5(4), which prevents that provision from being effective in so far as it allows some of the authorised facilities — the 'démolisseurs agréés' (the authorised demolishers) — to refuse to accept end-of use vehicles and fails to provide for a system to recompense those demolishers.*"

Following the ruling in 2010, the French law on the ELV sector was completely revised by Decree 2011-153 of 4 February 2011. Article R543-157 thus states: "*Authorised ELV centres that belong to a network set up by a producer in accordance with Article R. 543-156-1 and independent authorised ELV centres may not invoice owners who deliver an end-of-life vehicle to their facilities for any costs, unless the vehicle has been stripped of its essential parts, such as the powertrain, the catalytic converter where the vehicle was equipped with one when it was released to the market and the bodywork, or it contains waste or non-approved equipment which has been added to it and which, by its nature or quantity, increase the end-of-life vehicle treatment cost*". (French implementation report, 2011-2014)

More details on the French regulations can be found in the French Implementation Report 2011-2014 under Question 1.10.

At least **19 Member States** have limited the guarantee of free take-back by the condition that the vehicle contains the essential parts and that no waste has been added. In most cases, the wording of the national legislation is identical or very similar to paragraph 3 of Article 5(4).

Croatia has included the exception for cases of incomplete vehicles.

⁹ Commission of the European Communities vs French Republic; Case C-64/09; 2009/C 90/2, 18.04.2009

The remaining countries did not specify in their reports whether and how they have made use of the provision to limit the free take-back to certain conditions. They mostly referred to respective legal regulations.

5.9 Mutual recognition of CoDs among Member States pursuant to Article 5(5) (1.11)

Article 5(5)

Member States shall take the necessary measures to ensure that their competent authorities mutually recognise and accept the certificates of destruction issued in other Member States in accordance with paragraph 3.

To this end, minimum requirements for the certificate of destruction shall be established. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 11(3).

Questions

- 1.11. *Have the necessary measures pursuant to Article 5(5) been taken?*
 - 1.11.1. *If the answer to 1.11 is 'Yes', please provide details*
 - 1.11.2. *If the answer to 1.11 is 'No', please state the reasons why.*

All Member States reported that certificates of destruction issued in other Member States are recognized and accepted by the competent authorities according to Article 5(5). Most of the countries defined minimal requirements for the content of the CoD without specifying any form.

In **Estonia**, the ministry of Environment publishes on its webpage a list of authorised dismantlers in the English language for authorities from other Member States and other economic operators. The aim is that authorities from other Member States can assess through the CoD if an ELV sent for treatment in Estonia was treated in an authorised facility.

In **Luxembourg**, the National Technical Control Body (SNCT) holds a list of duly authorised facilities in Luxembourg and bordering regions. The Environment Agency is immediately notified when a certificate from a new foreign facility is received. The Environment Agency then checks whether this facility is duly authorised to issue certificates of destruction and adds it to the list.

In **Slovakia**, a certified translation has to be delivered together with the CoD if the ELV is treated in another Member State.

The related infringement procedure against **Belgium** has been closed and for the reporting periods 2008-2011 and 2011-2014 the corresponding provisions of Article 5(5) have been transposed into national law.

Slovenia implemented the provisions regarding Article 5(5) for the first time in reporting period 2011-2014.

5.10 Storage and treatment in compliance with minimal requirements set out in Annex I, pursuant to Article 6(1) (1.12)

Article 6(1)

Member States shall take the necessary measures to ensure that all end-of life vehicles are stored (even temporarily) and treated in accordance with the general requirements laid down in Article 4 of Directive 75/442/EEC, and in compliance with the minimum technical requirements set out in Annex I to this Directive, without prejudice to national regulations on health and environment.

Questions

- 1.12. Have the necessary measures pursuant to Article 6(1) been taken? (Yes/No)
- 1.12.1. If the answer to 1.12 is 'Yes', please provide details.
- 1.12.2. If the answer to 1.12 is 'No', please state the reasons why.

All Member States reported that they have transposed the provisions of Article 6(1) concerning the minimal requirements for storage and treatment. There is no indication of remarkable changes during the reporting period. Most countries specify the regulation and paragraphs where the respective information can be found.

5.11 Permits and registration of ATF pursuant to Article 6(2) (1.13)

Article 6(2)

Member States shall take the necessary measures to ensure that any establishment or undertaking carrying out treatment operations obtains a permit from or be registered with the competent authorities, in compliance with Articles 9, 10 and 11 of Directive 75/442/EEC.

The derogation from the permit requirement referred to in Article 11(1)(b) of Directive 75/442/EEC may apply to recovery operations concerning waste of end-of life vehicles after they have been treated according to Annex 1(3) to this Directive if there is an inspection by the competent authorities before the registration. This inspection shall verify:

- (a) type and quantities of waste to be treated;*
- (b) general technical requirements to be complied with;*
- (c) safety precautions to be taken,*

in order to achieve the objectives referred to in Article 4 of Directive 75/442/EEC. This inspection shall take place once a year. Member States using the derogation shall send the results to the Commission.

Questions

- 1.13. Have the necessary measures pursuant to Article 6(2) been taken? (Yes/No)
- 1.13.1. If the answer to 1.13 is 'Yes', please provide details.
- 1.13.2. If the answer to 1.13 is 'No', please state the reasons why.
- 1.13.3. If the answer to 1.13 is 'Yes', has any derogation under Article 6(2), second paragraph, been applied? (Yes/No)
- 1.13.4. If the answer to 1.13.3 is 'Yes', please provide details.

1.13.5. *If the answer to 1.13.3 is 'Yes', have the results been sent to the Commission? (Yes/No)*

1.13.6. *If the answer to 1.13.5 is 'No', please state the reasons why.*

All Member States confirmed in their implementation reports for the period 2008-2014 that establishments or undertakings carrying out treatment operations must have a permit from or must be registered with the competent authorities. A complete transposition of this provision was already reported for the period 2005-2008.

The situation for using derogations according to the second paragraph under Article 6(2) also remained unchanged: **Italy** and **UK** are the only countries that reported using this exemption.

The answers concerning existing derogations are missing from two countries, **Denmark** and **Slovakia**.

5.12 Minimum requirements for ATF pursuant to Article 6(3) and Annex I (1.14)

Article 6(3)

Member States shall take the necessary measures to ensure that any establishment or undertaking carrying out treatment operations fulfils at least the following obligations in accordance with Annex I:

(a) end-of life vehicles shall be stripped before further treatment or other equivalent arrangements are made in order to reduce any adverse impact on the environment. Components or materials labelled or otherwise made identifiable in accordance with Article 4(2) shall be stripped before further treatment;

(b) hazardous materials and components shall be removed and segregated in a selective way so as not to contaminate subsequent shredder waste from end-of life vehicles;

(c) stripping operations and storage shall be carried out in such a way as to ensure the suitability of vehicle components for reuse and recovery, and in particular for recycling.

Treatment operations for depollution of end-of life vehicles as referred to in Annex I(3) shall be carried out as soon as possible.

Questions

1.14. *Have the necessary measures pursuant to Article 6(3) been taken? (Yes/No)*

1.14.1. *If the answer to 1.14 is 'Yes', please provide details.*

1.14.2. *If the answer to 1.14 is 'No', please state the reasons why.*

All Member States confirmed that they have transposed the minimum requirements for ATFs pursuant to Article 6(3). With the exception of **France** (see below), there is no indication of remarkable changes during the reporting period.

Several countries have set legal deadlines for depollution and/or treatment of end-of-life vehicles. **Spain** stipulates that treatment operations at authorised treatment centres must be completed within 30 days. **Denmark**, **Ireland** and **Romania** require the treatment facilities to depollute the vehicle within a defined time: **Ireland** asks for depollution within 10 days after delivery of the vehicle, **Denmark** requires depollution within one month and **Romania** defines a period of three months from the CoD's date of issue.

France faced an infringement procedure for different reasons including the non-compliance with Article 6(3). The Commission claimed that France failed "to have regard to the concept of 'stripping',

referring to the first stage of the treatment operations of end-of use vehicles, namely that of the removal of those parts which are easily dismantled, prior to the depollution operation". After being referred to Court, France revised the legislation on the ELV sector completely by Decree 2011-153 of 4 February 2011.

5.13 Minimum content of permits pursuant Article 6(4) (1.15)

Article 6(4)

Member States shall take the necessary measures to ensure that the permit or registration referred to in paragraph 2 includes all conditions necessary for compliance with the requirements of paragraphs 1, 2 and 3.

Questions

- 1.15. Have the necessary measures pursuant to Article 6(4) been taken? (Yes/No)
- 1.15.1. If the answer to 1.15 is 'Yes', please provide details.
- 1.15.2. If the answer to 1.15 is 'No', please state the reasons why.

All Member States confirmed that they have transposed the requirements of Article 6(4) concerning the content of the permit or registration. There is no indication of remarkable changes during the reporting period. Most countries specified in their answers the national regulations and paragraphs where the respective information is found.

Hungary pointed out that, during reporting period 2011-2014, its implementing regulations were changed. The respective changes have been communicated to the Commission.

5.14 Introduction of certified environmental management systems pursuant to Article 6(5) (1.16)

Article 6(5)

Member States shall encourage establishments or undertakings, which carry out treatment operations to introduce, certified environmental management systems.

Questions

- 1.16. Have the necessary measures pursuant to Article 6(5) been taken? (Yes/No)
- 1.16.1. If the answer to 1.16 is 'Yes', please provide details.
- 1.16.2. If the answer to 1.16 is 'No', please state the reasons why.

Between 2005 and 2008, 19 countries had implemented means to encourage treatment establishments or undertakings to introduce certified environmental management systems according to the second Commission report.

In reporting period 2008-2014, **all Member States except Luxembourg** reported having introduced such measures. **Luxembourg** pointed out that certified environmental management systems are voluntary and no additional promotion measures have been established.

Member States have implemented a variety of incentives and supporting measures:

- In **Germany**, the results of tests carried out in accordance with EMAS shall be taken into account for the approval pursuant to Section 2(2) AltfahrzeugV.
- In **Croatia**, certified companies are granted derogation from the obligation to draw up waste management plans.
- In **Denmark**, ATFs must be certified within 4 months prior to their permanent registration.
- **Finland's** legislation stipulates that, in concluding contracts with treatment operators, a producer must give preference to those who have introduced certified environmental-management systems.
- In the **Netherlands**, car dismantling companies as a branch have established a specific certification system. Additionally, Auto Recycling Nederland (the organisation on behalf of car producers and importers who have the obligations arising from the decision on ELV management) contracts only certified companies.
- In **Italy**, the value of the financial guarantee required for the permit to be issued may be reduced if the collection centre and the treatment facility are registered.
- In **Slovenia**, organisations involved in the EMAS system may be granted reliefs and incentives relating, in particular, to a reduction in the frequency and scope of monitoring and reporting.
- Financial support for introducing environmental management systems is available in **Austria** and **Romania**.

Further support measures include guidance documents, information campaigns, brochures and training courses.

The number of authorised treatment facilities that established certified environmental management systems is shown in chapter 6.6.

5.15 Compliance with waste hierarchy pursuant to Article 7(1) (1.17)

Article 7(1)

Member States shall take the necessary measures to encourage the reuse of components which are suitable for reuse, the recovery of components which cannot be reused and the giving of preference to recycling when environmentally viable, without prejudice to requirements regarding the safety of vehicles and environmental requirements such as air emissions and noise control.

Questions

1.17. Have the necessary measures pursuant to Article 7(1) been taken? (Yes/No)

1.17.1. If the answer to 1.17 is 'Yes', please provide details.

1.17.2. If the answer to 1.17 is 'No', please state the reasons why.

All Member States confirmed that they have transposed the requirements of Article 7(1) concerning the content of the permit or registration. Except for **France**, there is no indication of remarkable changes during the reporting period.

In most countries, the provisions to implement the waste hierarchy in the context of ELV treatment are transposed in the ELV-specific regulations. Some countries refer to the principles laid down in the general waste legislation.

France faced an infringement procedure for various reasons including its non-compliance with Article 7(1). The Commission criticised that "the French authorities encourage the recycling of vehicle

components 'whenever the technical and economic circumstances allow so', whereas the Directive sets out a more binding obligation to recycle 'when environmentally viable'."

After being referred to Court, France revised its ELV legislation by Decree 2011-153 of 4 February 2011.

5.16 Establishment of reuse, recycling and recovery targets pursuant to Article 7(2) (1.18)

Article 7(2)

Member States shall take the necessary measures to ensure that the following targets are attained by economic operators:

(a) no later than 1 January 2006, for all end-of life vehicles, the reuse and recovery shall be increased to a minimum of 85 % by an average weight per vehicle and year. Within the same time limit the reuse and recycling shall be increased to a minimum of 80 % by an average weight per vehicle and year;

for vehicles produced before 1 January 1980, Member States may lay down lower targets, but not lower than 75 % for reuse and recovery and not lower than 70 % for reuse and recycling. Member States making use of this subparagraph shall inform the Commission and the other Member States of the reasons therefor;

(b) no later than 1 January 2015, for all end-of life vehicles, the reuse and recovery shall be increased to a minimum of 95 % by an average weight per vehicle and year. Within the same time limit, the re-use and recycling shall be increased to a minimum of 85 % by an average weight per vehicle and year. (..)

Questions

- 1.18. Have the necessary measures pursuant to Article 7(2) been taken? (Yes/No)
- 1.18.1. If the answer to 1.18 is 'Yes', please provide details. In particular, provide details on the reuse, recycling and recovery rates set for the years 2006 and 2015.
- 1.18.2. If the answer to 1.18 is 'No', please state the reasons why.
- 1.18.3. Has the provision contained in Article 7(2)(a), second paragraph, been used? If the answer is 'Yes', please provide details.
- 1.18.4. If the answer to question 1.18.3 is 'Yes', have the Commission and the other Member States been informed according to this provision? (Yes/No) If the answer is 'Yes', please provide details. If the answer is 'No', please state the reasons why.

The state of transposition with regard to the reuse, recycling and recovery targets in the reporting period 2008-2014 is unchanged compared to the situation in the second reporting period 2005-2008: **all Member States except Bulgaria** transposed the targets set in Article 7(2) of the Directive literally. This applies to the targets that are valid from 2006 to 2014 and to the targets that have to be achieved by 2015.

Bulgaria set a reuse/recovery target of 87% and a reuse/recycling target of 81% for the year 2008. Both targets are raised stepwise to 95% for recovery and 85% for recycling. Intermediate steps are set for 2012 (91% for recovery and 83% for recycling) and for 2013 (93% for recovery and 84% for recycling).

Twelve countries use the possibility to set lower targets for vehicles produced before 1 January 1980: the **Czech Republic, Ireland, Greece, Spain, Hungary, Italy, Latvia, Poland, Portugal, Romania, Slovakia** and the **United Kingdom**. These are the same countries listed in the

second Commission report for 2005-2008 plus the countries Ireland and Spain, which were not covered by the second report.

5.17 Use of component and material coding standards pursuant to Article 8(1) (1.19)

Article 8(1)

Member States shall take the necessary measures to ensure that producers, in concert with material and equipment manufacturers, use component and material coding standards, in particular to facilitate the identification of those components and materials which are suitable for reuse and recovery.

Questions

- 1.19. Have the necessary measures pursuant to Article 8(1) been taken? (Yes/No)
- 1.19.1. If the answer to 1.19 is 'Yes', please provide details.
- 1.19.2. If the answer to 1.19 is 'No', please state the reasons why.

All countries except Greece reported that the provision was implemented into national law. **Greece** referred to the fact that there are no local vehicle manufacturers/producers. **Romania** specifies that the following reference standards may be applied: SR EN ISO 1043-1:2003, SR ISO 1043-2:1995, SR EN ISO 11469:2001 for plastic materials and SR ISO 1629:1993 for rubber or latex components, with the exception of tyres.

5.18 Provision of dismantling information for new vehicles pursuant to Article 8(3) (1.20)

Article 8(3)

Member States shall take the necessary measures to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after the vehicle is put on the market. This information shall identify, as far as it is needed by treatment facilities in order to comply with the provisions of this Directive, the different vehicle components and materials, and the location of all hazardous substances in the vehicles, in particular with a view to the achievement of the objectives laid down in Article 7.

Questions

- 1.20. Have the necessary measures pursuant to Article 8(3) been taken? (Yes/No)
- 1.20.1. If the answer to 1.20 is 'Yes', please provide details.
- 1.20.2. If the answer to 1.20 is 'No', please state the reasons why.

All countries transposed Article 8(3) into national law.

Most countries reported that the relevant information on ELV dismantling is available through the International Dismantling Information System (IDIS) website, while in some countries, like **Greece** and **Denmark**, vehicle importers have established a database where all such information can be found.

A non-conformity case¹⁰ against **France** stressed that Member States are obliged “to take express measures to ensure vehicle manufacturers and component producers provide dismantling information, in the form of manuals or by means of electronic media, for each type of new vehicle put on the market.” The case was closed in 2011 and Article 8(3) is reported as being transposed into national law in reporting period 2011-2014.

5.19 Provision of information concerning dismantling, storage and testing from component manufacturers pursuant to Article 8(4) (1.21)

Article 8(4)

Without prejudice to commercial and industrial confidentiality, Member States shall take the necessary measures to ensure that manufacturers of components used in vehicles make available to authorised treatment facilities, as far as it is requested by these facilities, appropriate information concerning dismantling, storage and testing of components which can be reused.

Questions

- 1.21. Have the necessary measures pursuant to Article 8(4) been taken? (Yes/No)
- 1.21.1. If the answer to 1.21 is ‘Yes’, please provide details.
- 1.21.2. If the answer to 1.21 is ‘No’, please state the reasons why.

All countries transposed Article 8(4) into national law.

5.20 Publication of information on the recoverability, recyclability and environmentally sound treatment of ELVs by economic operators pursuant to Article 9(2) (1.22)

Article 9(2)

Member States shall require in each case the relevant economic operators to publish information on:

- *the design of vehicles and their components with a view to their recoverability and recyclability,*
- *the environmentally sound treatment of end-of life vehicles, in particular the removal of all fluids and dismantling,*
- *the development and optimisation of ways to reuse, recycle and recover end-of life vehicles and their components,*
- *the progress achieved with regard to recovery and recycling to reduce the waste to be disposed of and to increase the recovery and recycling rates.*

The producer must make this information accessible to the prospective buyers of vehicles. It shall be included in promotional literature used in the marketing of the new vehicle.

Questions

- 1.22. Have the necessary measures pursuant to Article 9(2) been taken? (Yes/No)

¹⁰ Commission of the European Communities vs French Republic; Case C-64/09; 2009/C 90/25

1.22.1. *If the answer to 1.22 is 'Yes', please provide details.*

1.22.2. *If the answer to 1.22 is 'No', please state the reasons why.*

For reporting period 2005-2008, **nineteen Member States** reported having obliged their economic operators – mostly producers – to publish information concerning vehicle design, environmentally sound treatment, waste prevention and the progress achieved with regard to recovery and recycling.

For the period 2008-2014, **all Member States** except **Sweden** claimed that the necessary measures had been transposed.

Sweden stated: *“The legislation is directed towards producers, not towards the economic operators. This is included in an ongoing overview of the legislation.”* The remark that this aspect is included in an ongoing overview was made in both implementation reports in the period 2008-2014 and was already mentioned in the second Commission report for the period 2005-2008.

In **Finland**, producers should submit an annual report about any arranged information activities to the Centre for Economic Development, Transport and the Environment, Pirkanmaa, which is the institution that supervises producer responsibility for waste treatment.

6 Assessment of Implementation (part II)

6.1 New measures to prevent the use of hazardous substances (2.1)

Article 4(1)(a) and (b)

In order to promote the prevention of waste Member States shall encourage, in particular:

(a) vehicle manufacturers, in liaison with material and equipment manufacturers, to limit the use of hazardous substances in vehicles and to reduce them as far as possible from the conception of the vehicle onwards, so as in particular to prevent their release into the environment, make recycling easier, and avoid the need to dispose of hazardous waste;

(b) the design and production of new vehicles which take into full account and facilitate the dismantling, reuse and recovery, in particular the recycling, of end-of life vehicles, their components and materials.

Questions

2.1. *Have any new measures in accordance with Articles 4(1)(a) and (b) been taken? (Yes/No)*

2.1.1. *If the answer to 2.1 is 'Yes', please provide details.*

Cyprus, Estonia, Greece, Luxembourg and the **Netherlands** reported that no new measures were implemented due to the absence of any or relevant car manufacturing industry. **Austria, Czech Republic, Spain, Ireland, Croatia, Latvia, Malta, Slovenia, Slovakia, Sweden, Lithuania, United Kingdom** and **Finland** indicated that no new measures were implemented in any of the two reporting periods.

Belgium reported in both periods that Article 4(1)(a) and (b) is transposed in deferral legislation. The environmental policy agreement includes both a prevention plan and an annual report of measures and indicators. It is not clear if this is a change compared to previous reporting periods.

Bulgaria implemented new measures in period 2011-2014 that refer to the reduction of waste from vehicles and restrict the use of hazardous substances, facilitate dismantling, reuse, recovery and recycling of ELVs and encourage using greater amounts of recycled material in motor vehicle manufacturing.

Germany reported several new measures for both periods. The automobile industry took several measures to limit the use of hazardous substances:

- To improve the identification of parts containing hazardous substances, the International Material Data System (IMDS) was adapted between 2008-2011 to show material composition along the production chain.
- The automotive industry developed a list that declares certain information about substances relevant to parts and materials supplied to automobile manufacturers, the so-called Global Automotive Declarable Substance List (GADSL, <http://www.gadsl.org/>). The list was already mentioned in the 2005-2008 report and repeated in the 2008-2011 and the 2011-2014 reports. This list is still in active use and further development.
- For reporting periods 2008-2011 and 2011-2014, substitutions reduced or eliminated the use of heavy metals in many different applications (especially cadmium, hexavalent chromium, quicksilver and lead). The work of the vehicle manufacturing industry and the upstream supply chains on heavy metal substitution concerned many thousand parts. In relation to the product life cycle, emissions were reduced between 2000 and 2005 and 2008 by respectively 99.6% for lead, 96% for cadmium and nearly completely (99.99%) for hexavalent chromium.
- The existing extensive regulations of the vehicle manufacturer have been adapted to current developments. For period 2008-2011, this entailed, for example, renewing and revising the international purchasing conditions and increasing the requirements for documentation, data supply and sustainability (ecological, economic and social). In 2011-2014, adjustments were needed for the various statutory prohibitions, for example REACH (Regulation (EC) no. 1907/2006) and the Stockholm Convention on Persistent Organic Pollutants (POPs Convention).

The automobile industry also adopted measures to improve automobile design for recycling:

- "Strategic minerals" use could be reduced by material substitution (for example, gold on circuit boards and neodymium- and dysprosium in magnets). It is difficult to recycle such elements from ELVs and therefore important to substitute them.
- The OBD-Tool (on-board-diagnose tool) for the simple and safe trigger of pyrotechnic components, which was still in testing in period 2008-2011, is now on the market.
- The ELV recycling industry continues to improve post-shredder technology to increase the recyclable material which can be extracted from ELVs and reduce dismantling costs. In addition, progress was achieved in the treatment of the shredder light fraction to separate and extract iron and steel still contained in this fraction.

Other research and development projects, including some on behalf of and funded by the German Federal Government, seek to improve and develop recycling processes aimed at components and materials from electric vehicles.

Denmark states in both reports that the relevant articles have been implemented (Article 15 in the scrap vehicle order and Art. 5 in the Environmental protection act), but no detailed specifications are given. It is not clear from the report if this remark refers to a new development or to previous years.

Similar to Germany, **France** reported activities carried out by the vehicle manufacturing industry regarding the use of the GADSL to prevent the use of heavy metals, the IDIS Database as a dismantling guide for over 1 900 vehicles of 69 different brands and use of special adapters to facilitate the treatment of pyrotechnic devices (ODB-Tool). Other actions taken by France's industry include:

- reducing the diversity of materials. For example, PSA announced it will soon begin making single-material parts to facilitate sorting, and Peugeot limited the number of plastics used;
- adapting the structure of vehicles. For example, Renault uses foam seats without metal inserts to make it easier to recycle them;

- improving the sorting process. For example, manufacturers – especially Renault – work with their suppliers upstream and ELV recycling facilities to simplify ELV dismantling and depollution;
- joining forces between manufacturers to reduce the quantities of waste produced per vehicle in-house and to implement programmes to recover such waste (Renault for example reduced the quantity of waste generated per vehicle by 67%);
- developing a market for parts intended for reuse. Defective parts are removed, returned to manufacturers for refurbishment and then reused. This process avoids the manufacturing of new parts and therefore the unnecessary use of non-renewable resources. BMW and PSA (SECOIA) developed their own special network for collection, reclamation and reuse of parts.

In 2008, **Italy** facilitated a programme together with vehicle manufacturers for preventing the generation of waste by designing and developing materials to limit the environmental impact of waste from processing and by identifying measures to facilitate reuse and recovery of components and materials.

The **Netherlands** has no producers of vehicles. Active automobile importers in the Netherlands have only a limited impact on international car manufacturers. The preventive measures which are taking place focus on reducing the use of heavy metals and publishing information on disassembly or reuse.

In **Poland** during reporting period 2008-2011, the requisite legal measures were taken in the form of Article 6(1) and (2) of the Act of 20 January 2005 on the recycling of end-of-life vehicles. Further information on the content of the Article 6(1) or other measures is not known. In period 2011-2014, no new measures were taken.

The new measures reported by **Portugal** refer to the update of the International Dismantling Information System (IDIS) by the automobile industry. The database was updated in 2010, which made available data on 73 brands and 35 648 car models, representing a total of about 167 000 components. In 2013, a new version of the International Dismantling information System (IDIS) was released, with information relating to 71 brands, 895 car models and 1 858 variants.

Romania reported several measures adopted in both periods:

- SC Automobile Dacia SA meets its obligation to limit the use of hazardous substances in vehicle construction starting from the design stage, taking account of the ban on the use of heavy metals: mercury, hexavalent chromium, cadmium, lead. The report provides an exhaustive list of parts and components which were replaced by heavy-metal free substitutes.
- When a new vehicle model is launched, since 2008 it is mandatory to meet the requirements for type-approval, which include documenting all results of activities about the compatibility vehicle design with dismantling, reuse and recovery.
- In both periods, the Romanian automobile industry made continuous efforts to ban heavy metals.
- The "Global Automotive Declarable Substance List" (www.gadsl.org) has been adapted.
- In order to improve and simplify neutralising pyrotechnic components within vehicles, a new standard of activation via the OBD (standardised global Ethernet of on-board diagnostics) interface was developed by vehicle manufacturers.

Summary

New measures addressing the ban on heavy metals are mostly undertaken by the automobile industry and include the development and introduction of the 'Global Automotive Declarable Substance List' (GADSL), which includes information on declaring certain information about substances relevant to parts and material supplied to automobile manufacturers, adopting the IMDS to show the material composition along the production chain and substituting parts and materials to avoid using heavy metals.

Measures concerning the design for recycling concentrate mostly on undertakings by the automobile industry. Some countries reported measures to improve the treatment process to simplify dismantling and depolluting ELVs, which includes some state-financed research projects. Other measures addressing the design for recycling include the development of the OBD-Tool (On-Board-Diagnose-Tool) for the simple and safe trigger of pyrotechnic components. According to Germany, the ELV recycling industry continuously improves post-shredder technology (especially for SLF) to extract more recyclable fractions. France reported that some vehicle producers reduce material diversity and component structure to allow easier treatment and have additionally developed their own special network for collection, reclamation and reuse of parts to prevent waste generation.

6.2 Quantities of recycled materials and market situation for recycled materials (2.2)

Article 4(1) (c)

In order to promote the prevention of waste Member States shall encourage, in particular:

(c) vehicle manufacturers, in liaison with material and equipment manufacturers, to integrate an increasing quantity of recycled material in vehicles and other products, in order to develop the markets for recycled materials.

Questions

2.2. *In accordance with Article 4(1)(c), please provide the available information on types and quantities of recycled materials in vehicles and in other products as well as on the market situation for recycled materials.*

Bulgaria, Cyprus, Estonia, Greece, Ireland, Lithuania, Luxembourg, Malta, Slovenia and Finland reported that no information is available because there are no local vehicle producers. **Croatia, Italy, Latvia and Slovakia** simply stated that the information is not available.

Austria assumed that the use of recycled material in vehicle production increases because of the market situation for recyclables and due to legal obligations for recycling. Quantitative information is not provided.

Belgium has an environmental policy agreement that includes provisions to encourage manufacturers to use recycled materials in vehicles and other products, but no reports or data were requested and therefore no detailed information is available.

The **Czech Republic** did not have information from vehicle producers about using recycled materials but reported on other material used after depollution (batteries, liquids, metal parts, tyres, glass, etc.).

Germany provided comprehensive information on trends and the market situation in both reporting periods. The situation has been similar within the last three reporting periods; vehicle producers support the increased use of recycled material. Several producers reported achievements in using recycled material:

- Daimler increased the use of recycled plastics by 37%, according to 2013 data;
- Opel is able to use 45 000 tonnes of recycled plastics in car production per year;
- BMW today substitutes 20% of the used thermoplastics with recycled plastic. Around 25% of BMW I exteriors are made from recycled plastic. The BMW i3 interior contains an additional 25% of renewable materials and recycled plastics.

Germany also reported obstacles that might dampen the trend toward recycled material use:

- The Committee for Risk Assessment (RAC) suggested reducing the amount of permitted lead concentration in recycled material to 300ppm. This could decrease the use of secondary non-ferrous metals (e.g. aluminium alloy) that include lead above the suggested level.

According to the waste hierarchy, waste prevention is more desirable than recycling. It is a priority to partly avoid recycling opportunities provided that less waste is overall produced, for example by using lightweight construction materials. This would mean that a steady increase of recycled material is not always feasible.

In the recycled materials market, between 2011 and 2014 the price for steel scrap decreased slightly, but it was still high enough to maintain a working trade market. The same applies to non-ferrous metals. However, the market for recycling plastic is more heterogeneous; demand for high-quality plastics (especially production waste) is high. For glass, the range of profit or expenses depends on the glass quality. The generation of used rubber and tyres is decreasing due to longer tyre lifespans, but at the same time imports of tyres for treatment are increasing. The capacity to treat tyres now exceeds the German waste generation. Reused tyres as well as products from material recycling (granulates) have a positive market value while tyre treatment and disposal usually requires extra payment.

Electric transport is increasingly seen as an important means to reduce carbon emissions to achieve reduced greenhouse-gas emission targets. To prepare for the growing popularity of electric cars, several research projects to develop new treatment and recovery processes (magnetic materials, traction batteries, carbon fibres etc.) have started or continued between 2011 and 2014 (a comprehensive list can be found in the German implementation report).

In **Spain** around 95% of metals in vehicles (ferrous and non-ferrous) are recycled. The situation with plastics is more complex; using recycled materials in vehicles is increasing, but due to the material degradation and the requirements for car parts, a closed loop in the recycling market is not possible. Most parts from recycled plastics are used in non-visible and less critical parts of the car.

France reported that recycled metals were widely used and the use of recycled plastic was increasing. Some achievements are:

- Renault set targets of 20% recycled plastic out of the total amount of plastic used in its new vehicles from 2015. The Captur model already achieves 16%.
- PSA increased the use of recycled polymers from 6% of the total amount of polymers contained in a vehicle in 2007 to 20% in 2011. The target is 30% by 2015.
- Ford included 250 parts from recycled material in its European vehicles.
- Toyota included 5.8 kg of recycled material in the Prius. Using recycled material is also promoted in other models.

Plastic parts dismantling is still a niche market due to low prices. Shredding companies are investing more and more in this market.

Hungary reported that non-ferrous and ferrous metals face a good market situation. Tyres and glass have very limited recycling market demand (tyres are mostly incinerated)

The Netherlands referred to the annual reports of the organisation ARN¹¹ without any further information.

Poland reported that recycled ferrous and non-ferrous metals are mainly used in vehicle production. Plastics are also recycled, but the recycling process is more complex. The actual figures provided in the reports are inconsistent and lack information about scope and methodological background; they can therefore not be interpreted.

In **Portugal**, manufacturers of vehicle materials and equipment sent annual reports regarding action taken to integrate recycled materials into production and information on the development of the

¹¹ <http://www.arn.nl/en/>

recycling market to the competent authority (APA). It seems that not all manufacturers responded to the survey, and the quality of answers varied. Figures on the amount of recycled materials are not available, but some general developments and achievements of the producers were reported:

- Renault eco2 vehicles included a minimum of 7% of recycled plastic (a figure which increases to up to 17% in some models), representing 5-37 kg per vehicle.
- Portugal has operators who are able to manage all kinds of waste materials/components and is thus self-sufficient for ELV treatment.
- Some materials are exported for commercial reasons, usually those with high market values like ferrous metals, plastics, catalytic converters and batteries. Materials such as glass, tyres, coolant, fuel, brake fluid, filters and fragmentation waste are managed entirely in Portugal.
- Some new achievements were reached for reducing the amounts of hazardous substances used (example in glass and paint), in energy reduction, for using recycled metals (such as aluminium), in increasing design for reuse and dismantling and in other areas.

Romania reported some achievements toward using recycled materials in vehicles:

- All Dacia vehicles placed on the market include materials made from recycled plastics. At present, 8% of components in Logan vehicles are made from recycled plastic.
- An increase in the use of recycled metals, such as copper, lead and aluminium was reported.
- Vehicles placed on the market in 2010 contain integrated recycled materials, such as 8-30 kg of polypropylene per vehicle depending on the features (e.g. in bars or wheel guards), up to 3 kg polyamide (e.g. in the gearbox casing, radiator, air regulator), PET and PE.
- Since 2008, Dacia vehicles comply with the Dacia Eco2 environmental signature for diesel engines, which means that the CO₂ emission is lower than 140 g/km, 95% of the weight of materials can be recovered and a minimum of 5% of the plastic used in vehicle construction originates from recycled materials.
- Ford Transit Connect contains components manufactured partly from recycled polypropylene: air filter casing (up to 30%) and heater casing (up to 20%).

For vehicles manufactured in Romania, 10% of a vehicle's total mass of plastic material is from recycled plastics.

The only vehicle producer in **Slovenia** is a French company. There are no data available on the type and quantity of recycled materials in vehicles.

Sweden did not have exact figures or information about recycled materials in vehicle production. A market for reused materials/components reportedly exists and, to some extent, recycled materials enter production (differs between producers).

In the **United Kingdom**, no exact figures on the amounts of recycled materials used in vehicles were available. Metals use (ferrous and non-ferrous) is very high due to the economic and environmental advantages. Some manufacturers use recycled plastic and rubber in certain components. Glass from vehicles is known to be recycled into aggregates, and tyres are recycled into safety surfaces and similar secondary uses for rubber.

Finland reported having no significant car manufacturing industry. The small-scale manufacturing industry works under licenses from the foreign parent companies.

Summary

Quantitative information about types and quantities of recycled materials and the recycled materials market situation is generally very poor. Most of the countries did not report exact figures and instead only reported on national obligations or incentives to encourage producers to use more recycled material.

Overall, metals (ferrous and non-ferrous) are recycled to a high extent due to the high quality of the recycled material and the economic and environmental advantages. The market for recycled metal thrives.

Achieving the needed quality for recycled plastic is more complex. The share of recycled plastics in new vehicles is increasing, but it is still much lower than for metals. At present, the share of recycled plastics rarely exceeds a couple percent of the total plastic. Car producers have committed themselves to increasing the use of recycling plastic; some have set targets to increase the share of recycled plastics in vehicles to 20%.

Recycled tyres and glass have a more limited range of application and are usually managed within the countries. With regard to tyres, Germany stated that reused tyres as well as products from material recycling (granulates) have a positive market value, whereas treatment and disposal of used tyres usually need extra payment.

6.3 Number of vehicles collected and transferred to authorised treatment facilities (2.3)

Questions

2.3. Please indicate the number of vehicles collected and transferred to authorised treatment facilities in each calendar year of the reference period.

The 'number of vehicles collected and transferred to authorised treatment facilities' that is asked in question 2.3 of the Implementation Questionnaire should be in line with the 'total number of ELVs' that is requested for the compliance monitoring data pursuant to Decision 2005/293/EC. Both data sets were compared with the following results:

- For the majority of Member States (17 countries) the data are identical.
- For most of the remaining countries, the differences are small or refer to the years 2010 and 2013, for which preliminary data were often reported in the implementation reports.
- Serious differences exist for the Finnish data in the period 2011-2013, where the monitoring data are 60%-110% higher than the data reported in the implementation report. Finland did not provide an explanation for the differences.

The data presented in Table 2 rely on monitoring data, which are more complete and more consistent over time. In a few cases, the monitoring data were supplemented with data from implementation reports that were not available in the monitoring data set (shaded cells).

Total number of ELVs collected and transferred

The total number of vehicles transferred to ATFs in the EU rose sharply from 6.3 million vehicles in 2008 to 9 million vehicles in 2009. The rise was caused by the introduction of scrapping incentive schemes in Germany and in other countries in the context of the financial crisis. Scrapping schemes were introduced by more than 10 EU Member States in the years 2008 and 2009. Main contributors to the significant rise were **Germany**, with an increase of 1.4 million vehicles, **France** (plus 0.46 million vehicles), **Italy** (plus 0.41 vehicles) and **Spain** (plus 0.2 million vehicles). After 2009 the number of vehicles decreased stepwise to 6.2 million vehicles in 2013, which corresponds to the level before the financial crisis.

Table 2: Number of vehicles collected and transferred to authorised treatment facilities

Member State	2008	2009	2010	2011	2012	2013	2014
BE	141 521	140 993	170 562	165 016	160 615	134 506	:
BG	38 600	55 330	69 287	62 937	57 532	61 673	:
CZ	147 259	155 425	145 447	132 452	125 587	121 838	:
DK	101 042	96 830	100 480	93 487	106 504	125 650	:
DE	417 534	1778 593	500 193	466 160	476 601	500 322	:
EE	13 843	7 528	7 268	11 413	12 835	14 712	:
IE	127 612	152 455	158 237	134 960	102 073	92 467	:
EL	55 201	115 670	95 162	112 454	84 456	86 205	:
ES	748 071	952 367	839 637	671 927	687 824	734 776	:
FR	1109 876	1570 593	1583 283	1515 432	1209 477	1115 280	:
HR	:	:	:	45 853	35 213	32 135	:
IT	1203 184	1610 137	1246 546	952 461	902 611	876 052	:
CY	14 273	17 303	13 219	17 145	17 547	13 212	:
LV	10 968	10 590	10 640	9 387	10 228	9 003	:
LT	19 534	19 656	23 351	26 619	22 885	26 482	:
LU	2 865	6 908	6 303	2 341	2 834	2 290	:
HU	37 196	26 020	15 907	13 043	15 357	14 897	17 127
MT	:	:	330	2 526	2 530	1 198	:
NL	152 175	191 980	232 448	195 052	187 143	183 451	:
AT	63 975	87 364	82 144	80 004	64 809	73 993	:
PL	189 871	210 218	259 576	295 152	344 809	402 416	:
PT	107 746	107 946	107 419	77 929	92 008	92 112	:
RO	51 577	55 875	190 790	128 839	57 950	:	:
SI	6 780	7 043	6 807	6 598	5 447	6 116	6 261
SK	39 769	67 795	35 174	39 717	33 469	36 858	:
FI	103 000	96 270	119 000	136 000	119 000	99 300	:
SE	150 197	133 589	170 658	184 105	185 616	189 748	186 967
UK	1210 294	1327 517	1157 438	1220 873	1163 123	1149 459	:
EU-27	6270 000	9000 000	7350 000	6750 000	6250 000	6220 000	:
EU-28	:	:	:	:	6290 000	6250 000	:

Legend:

Shaded cells: Data from implementaton reports were used because monitoring data are not available

Comparison of countries

In Table 3, the number of vehicles transferred to ATF is related to the population in order to allow a comparison across countries. The table shows that, in 2013 in the EU, on average 11 vehicles per 1000 inhabitants were transferred to ATF. Country values vary between 2 vehicles per 1000 inhabitants in **Hungary** and 22 vehicles in **Denmark**, which is an astonishingly broad range and not easily explained. Besides Hungary, the number of vehicles transferred is particularly low in **Malta**, **Slovenia**, **Luxembourg** and **Latvia**. The numbers are highest in the Scandinavian countries (**Denmark**, **Sweden**, and **Finland**) and in **Ireland** and the **UK**.

Table 3: Number of vehicles collected and transferred to authorised treatment facilities in each MS, per 1 000 inhabitants

Member State	2008	2009	2010	2011	2012	2013	2014
BE	13	13	16	15	14	12	:
BG	5	7	9	9	8	8	:
CZ	14	15	14	13	12	12	:
DK	18	18	18	17	19	22	:
DE	5	22	6	6	6	6	:
EE	10	6	5	9	10	11	:
IE	28	34	35	29	22	20	:
EL	5	10	9	10	8	8	:
ES	16	21	18	14	15	16	:
FR	17	24	24	23	18	17	:
HR	:	:	:	11	8	8	:
IT	20	27	21	16	15	15	:
CY	18	21	16	20	20	15	:
LV	5	5	5	5	5	4	:
LT	6	6	8	9	8	9	:
LU	6	14	12	5	5	4	:
HU	4	3	2	1	2	2	2
MT	:	:	1	6	6	3	:
NL	9	12	14	12	11	11	:
AT	8	10	10	10	8	9	:
PL	5	6	7	8	9	11	:
PT	10	10	10	7	9	9	:
RO	3	3	9	6	3	:	:
SI	3	3	3	3	3	3	3
SK	7	13	7	7	6	7	:
FI	19	18	22	25	22	18	:
SE	16	14	18	19	19	20	19
UK	20	21	18	19	18	18	:
EU-27	13	18	15	13	12	12	:
EU-28	:	:	:	:	12	12	:
Minimum	3	3	1	1	2	2	2
Maximum	28	34	35	29	22	22	19
Median	10	13	10	10	9	11	:

6.4 Number of authorised or registered treatment facilities (2.4)

Questions

2.4. Please indicate the number of treatment facilities authorised or registered in accordance with Article 6.

According to Article 6(2), Member States shall make sure that any establishment or undertaking carrying out treatment operations for end-of-life vehicles obtain a permit from or be registered with the competent authorities. In question 2.4 of the implementation questionnaire, countries are asked to indicate the number of authorised or registered treatment facilities (ATF) for each reporting period.

Table 4 shows the reported numbers per country and for each of the two reporting periods 2008-2011 and 2011-2014 (see columns 2 and 6). Some countries reported data by year, whereas others gave one figure per reporting period. When annual data were reported, the table shows the last reference year of the respective period (see columns 3 and 7). The reported numbers cover dismantling and shredding facilities and may also include collection points and storage places. However, the data coverage is not always clear. In order to allow a comparison across countries, the table shows the number of ATFs in relation to the number of inhabitants and to the number of vehicles treated.

Whereas the data for the period 2008-2011 are complete (except for Croatia which was not yet member of the EU), data from five countries for the period 2011-2014 are either missing (**Denmark, Spain, Greece, Netherlands**) or unclear (**Latvia**).

In most countries, the number of ATFs increased from the first to the second reporting period. Strong increases were reported, for instance, by **Bulgaria, Lithuania, Malta, Romania and Slovenia**.

In answering question 1.7, **Portugal** explained that the number of ATFs increased from only 11 companies at the end of 2005 to 178 facilities at the end of 2011. At the same time, Portugal took different measures to fight illegal treatment of ELVs. The achieved number of licensed facilities (188 in 2013) is considered sufficient to adequately manage all end-of-life vehicles generated in Portugal, making Portugal self-sufficient in this respect.

A reduction of ATFs is reported only by five countries (Czech Republic, Germany, Hungary, Finland, Sweden) in three of which the decrease is only small (**Sweden, Germany, and Czech Republic**). Significant decreases are reported by **Finland** and by **Hungary**.

In **Hungary**, the reduction seems to refer mainly to collection points, whereas the number of dismantling facilities has decreased only slightly. In the context of question 2.10, Hungary explained that in the course of the economic recession, the average age of vehicles on the market rose from 10 years in 2006 to 13 in 2013 and that, in parallel, the number of ATFs on the market decreased, thus favouring illegal dismantling.

Finland's figures indicate a 50% reduction of authorised facilities between the two reporting periods. However, the available information appears contradictory. Whereas no explanation is provided for the strong drop in ATFs shown in the table, Finland explains in the answer to question 1.7 that about 270 reception points existed in Finland in the period 2011-2014 (compared to 113 ATF reported for the same period under question 2.4). An explanation could be that the lower figure refers to treatment facilities and does not include collection points.

The availability of ATFs across the EU and the Member States is reflected by the number of inhabitants (in thousands) which are, on average, served by one ATF. In the period from 2011-2014, the EU had on average (median) one ATF per 48 000 inhabitants. The number of inhabitants per ATF is highest in Croatia, Luxembourg, Slovakia and Slovenia. In Croatia, one ATF is available on average for 304 000 inhabitants (inh.).

Assuming that the number of treatment facilities in the five non-reporting countries stayed the same for 2011-2014 compared to the previous reporting period, the EU had approximately 12 900 treatment facilities, corresponding to an average of one facility per 40 000 inhabitants.

Table 4: Number of authorised and registered treatment facilities (ATF) in EU Member States

1	2	3	4	5	6	7	8	9
Country	Reporting period 2008 - 2011				Reporting period 2011 - 2014			
	No. of treatment facilities	Reference year/period	Inhabitants per installation (1000 inhab./ATF)	ELV transferred per ATF (ELV/ATF)	No. of treatment installations	Reference year/period	Inhabitants per installation (1000 inhab./ATF)	ELV transferred per ATF (ELV/ATF)
BE	107	2010	102	1 594	123	2013	91	1 094
BG	270	2008-2010	27	257	580	2011-2014	13	106
CZ	595	2012	18	244	569	2015	18	214
DK	218	2008-2010	25	461	:	:	:	:
DE	1 403	2010	58	357	1 366	2014	60	366
EE	48	2008-2010	28	151	64	2011-2014	21	230
IE	119	2010	38	1 330	173	2012-2013	27	534
EL	115	2011	97	827	:	:	:	:
ES	1 007	2008-2011	46	834	:	:	:	:
FR	1 637	2010	40	967	1 759	2011-2014	37	634
HR	:	:	:	:	14	2011-2014	304	2 295
IT	1 358	2009	44	918	1 699	2012	35	516
CY	12	2008-2010	69	1 102	16	2011-2014	54	826
LV	158	2008-2010	13	67	:	:	:	:
LT	214	2010	14	109	385	2013	8	69
LU	2	2008-2010	253	3 152	2	2011-2014	272	1 145
HU	218	2010	46	73	171	2011-2014	58	87
MT	1	2008-2010	415	330	5	2011-2014	85	240
NL	448	2011	37	519	:	:	:	:
AT	177	2008-2010	47	464	177	2011-2014	48	418
PL	644	2011	59	403	871	2013	44	462
PT	144	2010	73	746	188	2013	56	490
RO	249	2010	81	766	468	2014	43	:
SI	4	2008-2010	512	1 702	18	2011-2014	114	340
SK	37	2008-2010	146	951	41	2011-2014	132	899
FI	220	2008-2010	24	541	113	2011-2014	48	879
SE	344	2008-2010	27	496	341	2014	28	556
UK	1 616	2010	39	716	1 804	2013	36	637
Minimum			13	67			8	69
Median			46	541			48	503
Maximum			512	3 152			304	2 295

6.5 Number of ELVs with no or with a negative market value (2.5)

Questions

- 2.5. Please indicate the number of end-of-life vehicles delivered at authorised treatment facilities and having no or a negative market value. Please provide details on the average negative value of these end-of-life vehicles.

Czech Republic, Hungary, Latvia, The Netherlands, Slovenia, Slovakia and Austria do not collect data on this issue.

In **Belgium**, all ELVs collected in the three regions were processed free of charge. For some ELVs delivered to the centres, parts were already dismantled and the vehicle stripped of valuable spare parts, which reduced the ATF's profits. However, it appears that overall end-of-life vehicles have a positive market value.

Bulgaria, Cyprus, Estonia, Italy and Finland simply reported that there are no data for ELVs delivered to dismantling centres with zero or negative market value.

In **Germany**, final holders of vehicles usually receive payment when they return their end-of-life vehicles, provided that the vehicle is handed over in its entirety. The prices for secondary metals (scrap), which fluctuated at a high level during the reporting period, ensured a positive market value for end-of-life vehicles. No ELVs of negative market value were reported.

Denmark reported actual figures of the ELVs with and without positive market value:

Table 5: Number of ELVs with positive/negative market value reported by Denmark

ELV count in DK by year	2008	2009
Positive market value:	92 796	89 181
No positive market value:	7 904	7 649

In **Greece**, all ELVs delivered to treatment facilities are considered to have no market value.

All ELVs in **Spain** have a positive market value. The Ministry did not receive any reports to the contrary from the Autonomous Communities, the industry or users directly.

In **France**, all vehicles taken back and containing all of their components had positive market values. The average purchase price of ELVs in the period 2008-2011 ranged from €0 to several hundred euros (on average 155 € in 2011), depending on the condition of the vehicles presented for destruction. Similarly, in the second period, all vehicles were accepted at least at zero value when the ELV was delivered to an ATF, as this is a regulatory requirement.

Croatia reported actual counts of ELVs with no or negative market value.

Table 6: Number of ELVs with positive/negative market value reported by Croatia

ELV count in HR by year	2011	2012	2013
ELVs with no or negative market value	45 853	35 212	32 135

In **Ireland**, all ELVs delivered for treatment were formally reported by vehicle producers or other authorised treatment facilities as having positive market values; no negative value ELVs were reported. This is probably due to the market condition in relation to scrap metal.

Lithuania reported the following numbers of ELVs with no or negative market value:

Table 7: Number of ELVs with no or negative market value reported by Lithuania

Year	Number of ELVs with no or negative market value
2008	3 218
2009	7 196
2010	9 778
2011	8 249
2012	3 918
2013	5 734
2014	N/A

Luxembourg estimated that all ELVs have positive market value. Data on ELV market values were not collected; however, with the high scrap metal price, treatment facilities reported until 2009 sometimes purchasing discarded vehicles. No further information is available about changes in the situation since 2009.

Malta reported the following number of ELVs with no or negative market value:

Table 8: Number of ELVs with no or negative market value reported by Malta

ELV count in MT by year	2010	2011	2012	2013
ELVs with no market value	187	196	357	N/A
ELVs with negative market value		375	395	N/A

In **Poland**, who pays for dismantling costs is determined in an agreement signed between the dismantling centre operator and the individual that placed the vehicle on the market. According to dismantling centres, a positive market value is only possible when the ELV is complete and if the delivery cost is not included in the dismantling cost. Under current market conditions, however, the centres have to bear the cost of having vehicles delivered.

The number of incomplete vehicles transferred to dismantling centres could provide an approximation of the number of ELVs transferred to dismantling centres with negative or zero value. Poland reported the following numbers of ELVs with no or negative market value:

Table 9: Number of (incomplete) ELVs with no or negative market value reported by Poland

Year	Number of ELVs
2008	22 232
2009	21 838
2010	21 121
2011	33 171
2012	28 501
2013	18 564 (preliminary)

Portugal reports no ELVs with negative market value. In fact, in the period 2008-2011, the value of the materials resulting from dismantling and shredding of end-of-life vehicles, particularly ferrous and non-ferrous metals, has remained at levels which ensure the sustainability of the processing chain.

Romania also reports no ELVs with negative market value. Romanian regulation states that the difference between the cost of collection and treatment of ELVs and the revenues obtained from the sale of usable parts and secondary raw materials is funded by the Environment Fund. No financing applications were made during the period 21 April 2008 to 21 April 2011 and it therefore seems that there were no ELVs with negative market value.

Sweden stated that during the period reported “*the majority of the cars have a positive market value*”. No indication on exact figures or explanation was given.

Due to high metal prices, there have been only very few ELVs with negative market value in the **United Kingdom**. The few cases have been in remote, rural locations, such as certain island communities in Scotland.

Summary

Only eight Member States reported that vehicles with no or negative market value have been collected. **Greece** reported that all ELVs delivered to an ATF are considered as having no market value, while **Sweden** and the **United Kingdom** reported that this is the exception and that the majority of ELVs have a positive value. **Poland** estimated the number of ELVs without a market value as equalling the number of incomplete ELVs delivered at ATFs, since only complete ELVs generally create enough revenue through spare parts and secondary raw materials to have a positive market value. Other countries responded similarly that the completeness of the ELV is necessary for a positive market value. All remaining countries either did not collect data on this issue or reported that there are no ELVs without a market value delivered at an ATF.

6.6 Number of treatment establishments or undertakings with certified environmental management system (2.6)

Questions

2.6. *Please indicate the number of treatment establishments or undertakings which have introduced certified environmental management systems.*

Question 2.6 of the implementation report asks for the number of treatment establishments or undertakings with certified environmental management systems. The information provided by Member States for both reporting periods is summarised in Table 10. Where such information was available, the column ‘*comments*’ specifies the standard of certification to which the numbers of certified establishments refer.

Overall, 22 Member States provided information for at least one of the two reporting periods. No information, or only an estimate, was available in six Member States.

The available information indicates that certification according to the less demanding ISO 14001 standard is much more common than the EMAS certification. The development does not seem to be very dynamic: in most countries the number of certified companies remained at the same level during the two reporting periods. Significant increases in the number of certified establishments are only reported by a few countries, including **France** and **Romania**. The apparent increase in **Italy** is likely caused by different data coverage in the two periods (only EMAS in period 2008-2011; EMAS and ISO 14001 in 2011-2014).

The **Netherlands** indicates that a specific standard for car dismantlers is applied. The information from **Finland** is contradictory, indicating 33 certified establishments in the period 2008-2011 and zero establishments in the period 2011-2014.

Table 10: Number of treatment establishments with certified environmental management systems

1	2	3	4	5	6
Country	Reporting period 2008 - 2011		Reporting period 2011 - 2014		Comment
	No of treatment facilities	Reference year or period	No. of treatment facilities	Reference year or period	
BE	8	2008-2010	5	2011-2014	ISO 14001
BG	2	2008-2010	2	2011-2014	ISO 14001
CZ	:	:	:	:	
DK	218	2010	:	:	
DE	:	:	:	:	
EE	1	2008-2010	1	2011-2014	ISO 14001
IE	9	2008-2011	:	:	
EL	26	2008-2010	26	2011-2014	
ES	58	2008-2011	:	:	ISO 14001
FR	103	2008-2011	153	2011-2014	ISO 14001
HR	:	:	2	2011-2014	ISO 14001
IT	6	2009	98	2012	2012: EMAS: 6 companies; ISO 14001: 92 companies
CY	0	2008-2010	0	2011-2014	
LV	:	:	:	:	
LT	:	2008-2010	1	2011-2014	
LU	1	2008-2010	1	2011-2014	
HU	:	:	(17)	2011-2014	Estimation
MT	0	2008-2010	0	2011-2014	
NL	273	2011	:	:	Certified according to the KZD standard (Quality Care Dismantling).
AT	59	2008-2010	64	2011-2014	EMAS
PL	5	2011	10	2013	
PT	18	2008-2010	17	2013	2008-2010: ISO 14001; 2013: ISO 14001: 16 companies; EMAS: 1 company
RO	72	2011	95	2014	ISO 14001
SI	0	2008-2010	0	2011-2014	
SK	:	:	:	:	
FI	33	2008-2011	0	2011-2014	
SE	80 - 100	2008-2010	80 - 100	2011-2014	
UK	:	:	:	:	

6.7 New measures to encourage reuse and recovery of components (2.7)

Article 7(1)

Member States shall take the necessary measures to encourage the reuse of components which are suitable for reuse, the recovery of components which cannot be reused and the giving of preference to recycling when environmentally viable, without prejudice to requirements regarding the safety of vehicles and environmental requirements such as air emissions and noise control.

Questions

2.7. Have any new measures in accordance with Article 7(1) been taken? (Yes/No)

2.7.1. If the answer to 2.7 is 'Yes', please provide details.

Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Greece, Croatia, Ireland, Latvia, the Netherlands, Slovenia, Slovakia, Sweden, United Kingdom and Finland reported that no new measures concerning Article 7(1) were taken.

Belgium reported that for the period 2008-2011 several tools were included in the policy agreements, including that a system for mapping data on reuse of parts and fluids is required. Shredding facilities must work towards continuous improvements and implementing the best available technologies (BAT). The Walloon Region requires crushers to use BAT without generating excessive costs. In the second period, 2011-2014, no new measures were reported.

In **Germany**, the VDI-Guidelines 4080 to 4084 on the quality of used car parts, which include provisions for encouraging the reuse of car parts, were updated and revised in the two reporting periods.

- 2008-2011: the VDI guideline 4080 'Automobile recovery – Quality of used vehicle parts' and VDI guideline 4081 'Automobile recovery – description of vehicle, used part list and electronic data processing interfaces' were revised. Additionally, a research project developed solutions for the long-term procurement of spare parts with electronic sub-assemblies for the automotive industry.
- 2011-2014: the Guideline 4082 on depollution and preparation of vehicles for recycling and the Guideline 4084 on remanufactured engines were revised. Additionally, there were various research projects address reusing and recycling lithium batteries from electric cars.

In **Spain**, research projects were financed and supported relating to preventing and managing waste from ELVs in the period 2008-2011. More specifically, projects aimed at improving the reuse or recycling of vehicle components, recycling of automobile plastics, recycling of glass from vehicles and the recycling of used tyres. In the second period 2011-2014, no new measures were reported.

France reported that a new provision, referring to the option for car insurance experts to calculate the cost of repairing vehicles with reusable parts, was implemented in period 2011-2014.

Hungary states that new measures addressing Article 7(1) were only implemented in the period 2011-2014 and cites legal provisions implementing the waste hierarchy (Waste Law 2012) and more specific provisions on the reuse of ELV components laid down in Article 14 of the Act on ELV from 2014.

Italy carried out a programme in 2008 aiming to prevent waste generation by designing and developing materials, to limit environmental impact of waste from processing and to identify measures to facilitate reuse and recovery of components and materials.

Lithuania reported in both periods that new measures were taken and cited in reports and the corresponding national laws. No further information on new measures was provided.

Luxembourg confirmed that Article 7(1) is covered by national law (referring to an amended law of 17 June 1994 on waste prevention and management) but did not elaborate whether new measures were already taken.

Malta pointed out that conditions *“in line with the spirit of this Article”* were included in the permits of ELV treatment facilities.

Poland states that *“the requisite legal measures have been taken in the form of Article 6(1)(3) of the Act of 20 January 2005 on the recycling of end-of-life vehicles”*. No additional information on new measures was provided.

Portugal developed activities to encourage the effective reuse of components and the recycling of components which could not be reused. These activities include publications (magazines, leaflets, catalogues, etc.), public relations activities and promotional activities. Additionally, in 2011-2014 a guideline was developed to help to differentiate between reusable parts and non-reusable parts to be exported.

Romania stated in their report that the contents of Article 7(1) were transposed into national law and that the Environment Fund Administration under the coordination of the Ministry of Environment and Forests provided the necessary financial support for projects in the field of "Waste management, including management of hazardous waste".

Summary

For most of the countries, the new measures consist of research projects aiming at preventing waste from ELV treatment, improving the reuse or recycling of vehicle components and the recycling of automobile plastics, glass or other materials. Others reported measures to ensure that dismantlers and shredders work on continuous improvements and use the best available technique.

6.8 Reuse, recycling and recovery rates achieved (2.8)

Questions

2.8. Please provide information on the rates of reuse, recycling and recovery attained in each calendar year of the reference period, in pursuance of the objectives laid down in Article 7(2).

Data on the achieved reuse/recycling and reuse/recovery rates are available from all countries for all reference years within the two reporting periods considered (2008–2010 and 2011-2013). The only exceptions are the data for reference year 2013 from Romania and Slovenia, which had not yet been submitted by April 2016.

The results for 2013 are shown in Figure 1. The data for the whole period from 2008 to 2013 are presented in Table 11 and Table 12. For Romania and Slovenia, the rates refer to 2012, as data for 2013 were not yet available.

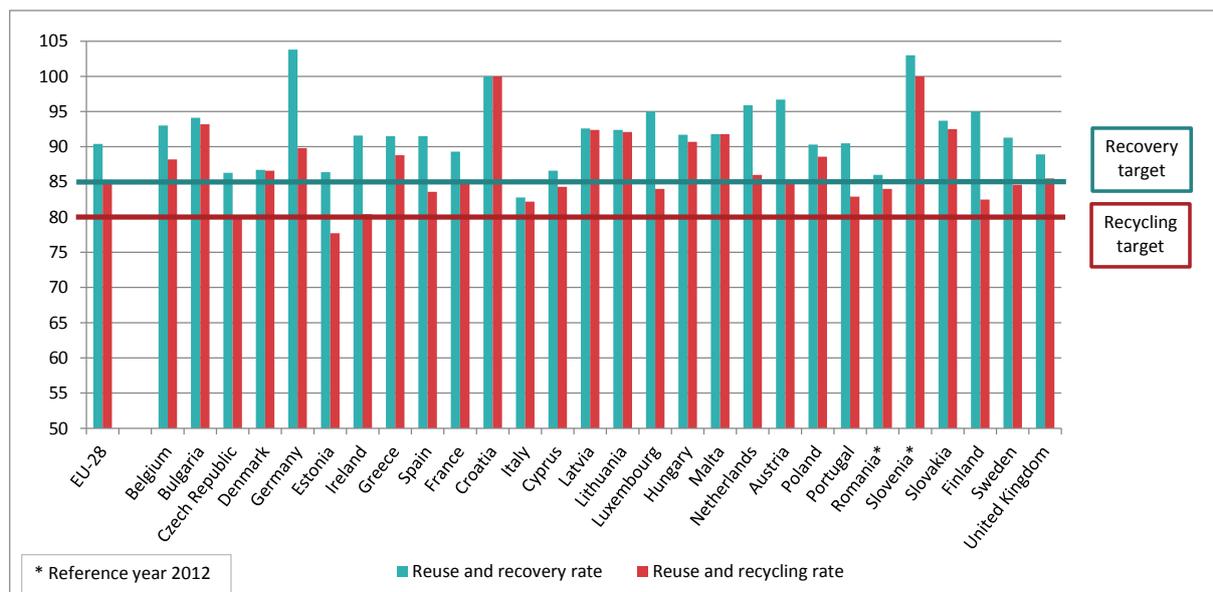


Figure 1: Achieved reuse/recycling and reuse/recovery rate by country for reference year 2013

Compliance with current targets

Table 11 and Table 12 show the reported reuse/recycling and reuse/recovery rates in Member States from 2008 to 2013. Red shaded cells indicate the countries' failures to meet the year's legal target.

The reuse/recycling rates were achieved by all countries except **Estonia** since reference year 2011. Estonia failed to meet the target in 2013 and also in some previous years (2010 and 2011).

The reuse/recovery rates were met by all countries except **Italy** since reference year 2012. Italy fell below the target in 2013 and in some previous years (2009 and 2012).

The two countries Germany and Slovenia reported reuse/recovery rates above 100%. In **Germany**, the seemingly implausible rate is caused by stock storage effects, i.e. by the fact that ELVs are not treated in the year of their arising (e.g. because of capacity limitations). In Germany, this phenomenon can still be attributed to the scrapping incentive scheme in 2008/2009.

In **Slovenia** the high rates are a temporary phenomenon caused by the transition from a public service system to a producer responsibility scheme.

The rates reported by **Finland** are not based on monitoring but on an estimate, which was in turn based on the number of ELVs. This approach is reflected by the constant rates over several years.

The situation looks similar for the **Czech Republic**, which reports constant rates since reference year 2009.

Distance to future targets

As of 1 January 2015, the legal targets for reuse, recycling and recovery rates were raised to 85% for reuse/recycling and 95% for reuse/recovery. In Table 11, green shaded cells indicate countries that met the targets already in 2013 or in previous years. The future targets for reuse and recycling were met in 2013 by 16 Member States (17 with Slovenia). A few countries, like **Luxembourg** and **Sweden**, met the target in previous years but fell below in 2013.

The distance to target is clearly higher for the reuse and recovery target. The respective target was met in 2013 by only 6 Member States. The achievement will be a challenging task for a number of Member States.

Table 11: Reuse/recycling rates (%) achieved per Member State in the period 2008-2013

Country	2008	2009	2010	2011	2012	2013
BE	88.0	88.4	89.0	88.2	88.7	88.2
BG	81.0	82.7	88.9	90.0	89.5	93.2
CZ	80.0	80.3	80.3	80.3	80.3	80.3
DK	82.7	82.0	90.5	92.8	92.4	86.6
DE	89.2	82.9	95.5	93.4	92.3	89.8
EE	92.4	87.2	77.3	76.1	80.9	77.7
IE	75.9	78.9	77.0	80.5	81.8	80.4
EL	85.7	86.5	84.5	85.2	82.8	88.8
ES	82.5	82.6	82.8	82.9	83.0	83.6
FR	79.9	78.6	79.0	80.8	82.4	85.3
HR	:	:	:	:	97.2	100.0
IT	84.3	81.8	83.2	84.8	80.8	82.2
CY	78.3	87.1	81.1	84.0	84.7	84.3
LV	87.0	85.0	85.7	85.4	97.6	92.4
LT	85.0	86.0	88.1	87.2	89.2	92.1
LU	84.0	81.0	85.0	82.9	85.0	84.0
HU	83.0	84.4	82.1	84.4	84.4	90.7
MT	:	:	64.2	87.0	95.8	91.8
NL	84.4	84.1	83.3	83.1	83.7	86.0
AT	83.7	82.9	84.2	82.8	83.4	85.0
PL	79.5	87.1	88.8	89.5	90.4	88.6
PT	80.8	84.3	82.8	82.9	82.7	82.9
RO	83.7	80.1	80.9	82.9	84.0	:
SI	87.6	84.1	88.6	86.1	100.0	:
SK	88.4	88.8	88.4	93.1	89.9	92.5
FI	81.0	81.0	82.5	82.5	82.5	82.5
SE	83.0	86.0	84.4	84.4	85.0	84.6
UK	82.5	82.1	83.0	83.4	84.1	85.5

Achieved rate falls below the valid target of 80%

Achieved rate is above the 2015 target of 85%

Table 12: Reuse/recovery rates (%) achieved per Member State in the period 2008-2013

Country	2008	2009	2010	2011	2012	2013
BE	90.2	90.6	91.2	90.6	93.0	93.0
BG	86.7	89.2	89.2	92.0	91.3	94.1
CZ	86.0	86.3	86.3	86.3	86.3	86.3
DK	82.9	82.3	90.7	92.9	92.6	86.7
DE	92.9	86.7	106.2	108.2	106.3	103.8
EE	92.7	87.4	78.4	79.0	85.1	86.4
IE	81.8	82.3	77.4	82.7	87.8	91.6
EL	85.7	87.4	86.5	87.7	90.3	91.5
ES	85.7	86.0	85.7	87.4	88.2	91.5
FR	81.4	82.1	81.9	84.8	87.0	89.3
HR	:	:	:	:	99.9	100.0
IT	87.1	84.6	85.4	85.3	82.3	82.8
CY	79.8	92.9	86.9	86.6	86.9	86.6
LV	89.0	86.0	86.1	86.0	97.9	92.6
LT	85.0	86.0	88.5	87.4	90.1	92.4
LU	85.0	85.0	88.0	90.9	95.0	95.0
HU	84.4	86.2	86.8	86.2	86.2	91.7
MT	:	:	64.2	87.1	96.0	91.8
NL	85.6	85.2	95.3	96.2	96.1	95.9
AT	96.1	96.1	96.5	97.6	94.2	96.7
PL	80.1	88.0	89.8	91.5	92.8	90.3
PT	87.2	86.9	86.8	87.9	87.6	90.5
RO	86.5	85.3	85.5	86.8	86.0	:
SI	89.7	87.3	90.6	90.3	103.0	:
SK	88.8	89.6	90.2	94.6	91.2	93.7
FI	81.0	81.0	95.0	95.0	95.0	95.0
SE	91.0	90.0	91.1	90.8	90.6	91.3
UK	84.0	83.5	85.6	85.6	88.1	88.9

Achieved rate falls below the valid target of 85%

Achieved rate is above the 2015 target of 95%

6.9 Information from producers concerning ELV dismantling, storage and testing (2.9)

Questions

- 2.9. Please provide details on the information concerning dismantling, storage and testing made available by producers and manufacturers of components pursuant to Articles 8(3) and 8(4).

Austria, Belgium, Cyprus, Czech Republic, Germany, Greece, Spain, France, Croatia, Hungary, Ireland, Luxembourg, the Netherlands, Poland, Portugal, Romania, Slovenia, Sweden, Finland and the United Kingdom indicated using the IDIS system (International Dismantling Information System¹²), which allows access to information for types of vehicles put on the market, including their dismantling. This information is available on computer media and can be supplied free of charge to

¹² www.idis2.com

ELV management facilities upon request. IDIS allows vehicle parts to be viewed, includes details of the location of hazardous substances, instructions and manuals for dismantling the various models of vehicles, tools required for dismantling, vehicle part weights, materials used in different components, average time the operation takes, etc. It is regularly updated since, following the requirements of the ELV Directive and national legislation, producers are given six months from the moment when the vehicle is put on the market to provide dismantling information. The database currently contains information on approximately 1 000 vehicles of 50 brands produced by 26 automobile manufacturers. Car manufacturers that are not in the database have created their own similar solutions.

IDIS was initially developed by the European automotive industry and gained international attention in January 1999. Since then, the system's development has been controlled by an international group of car manufacturers (including 25 manufacturers from Europe, Japan, Korea and the USA). Through IDIS, vehicle dismantlers can now access dismantling information from all vehicle manufacturers on a DVD containing information directly relevant for recycled materials, information on handling pyrotechnic components and relating to the pre-treatment necessary before dismantling, and data concerning dismantling tools and techniques. IDIS provides a possibility to print manuals and check sheets for components of specific models for use by the dismantling mechanics.

Eight countries did not refer to IDIS in their answers to question 2.9:

Bulgaria repeats the obligation of producers to provide the information necessary for persons carrying out ELV treatment but does not detail how this is done.

Estonia states that *"no testing data have been available for the Estonian Ministry of the Environment"*. No further information is available.

Denmark, Italy, Lithuania, Malta, Latvia and **Slovakia** did not provide information on this topic.

6.10 Structural changes of the vehicle market or the treatment industries; distortion to competition (2.10)

Questions

2.10. Please provide information, pursuant to Article 9(1) on, if any, possible changes in the structure of motor vehicle dealing and of the collection, dismantling, shredding, recovery and recycling industries. Please indicate in particular if any competition distortion between or within Member States has been identified.

Austria, Cyprus, Italy, Lithuania, Romania, Sweden, Malta, Slovenia, Finland and the **United Kingdom** reported that no competition distortion could be detected and that no changes are to be reported, while **Bulgaria, Czech Republic, Croatia, Slovakia** and **Greece** stated that they do not have information on these issues.

Belgium reported extensive exports of (second-hand) vehicles to Africa and the Middle East from the port of Antwerp. This had an impact on the quantity of vehicles to be depolluted and processed (also in neighbouring countries). Belgium notes that the provision in Annex I to the Directive on end-of-life vehicles concerning glass processing gives rise to differences in interpretation between Member States, which primarily between neighbouring countries can result in shifts in the destination of ELVs to be shredded. Belgium also points out that using the metal content assumption may not give a realistic picture of the effective processing.

Germany reported several changes for both reporting periods.

Period 2008-2011:

- From 2004 to 2011, the number of ATFs increased slightly while the number of treated ELVs decreased from around half a million to 400 000. The reason is the increased export to neighbouring countries (especially new EU Member States).

- The scrappage premium in 2009 resulted in temporary ELV storage, which decreased after 2009 and led to a spare-parts surplus the market. The market price for stripped vehicles dropped to €10-€20/ tonne. The proportion of ELVs as shredder input decreased from 16% in 2004 to 9% in 2008. Due to the availability of other scrap, no capacity shortfall occurred. In 2009 and 2010, shredders took advantage of the increased availability of ELVs and the proportion in the input increased to 20%.

Period 2011-2014:

- After 2009, when which four times more ELVs were treated than in the previous year, the ELV treatment rates returned to similar levels pre-2009. The need for temporary storage was successfully reduced and the market price for stripped ELVs returned to normal. The proportion of ELVs as shredder input sprang back to 13% (2011 and 2012).
- Export of used vehicles to foreign countries (especially Member States in Eastern Europe) remained the primary reason for the currently low ELV generation. After a strong decline in 2009 (due to the scrappage premium), export again increased since 2011.
- Electric mobility options in Germany became more popular. The share of electric and hybrid-cars more than doubled during the period from 2011 to 2014 (electric from 2 300 to 12 200 and hybrid from 37 00 to 85 600). Although Germany reported research and development projects addressing electric vehicle recycling, electric mobility did not seem to have a direct impact on ELV generation and the ELV recycling rate.

Denmark set provisions to oppose trading scrap vehicles. Only the last registered owner can receive payment when delivering an ELV to an ATF. There is no information in any of the national implementation reports on when the provisions entered into force nor how exactly the system works.

Estonia reported a reduction in new-car purchases in 2009 because of the economic crisis, which increased slightly in 2010. The amount of ELVs delivered to ATFs developed accordingly; as car owners less frequently exchange their old cars for new ones, less ELVs were generated. In the reporting period 2011-2014, the market for new cars and the amount of dismantled ELVs increased continuously. Competition distortion between Estonia and other Member States has not been identified in any reporting period.

Spain reported a general decline in vehicle sales due to the economic crisis. The majority of not authorised treatment facilities ceased their activities because they could not issue certificates of destruction. No market distortions were detected.

Many changes occurred in **France** due to the Court of Justice of the European Union's ruling on 15 April 2010 against France for non-conformity in its transposition of the ELV Directive. French manufacturers now establish a network of approved ELV centres in France, which are subject to new requirements (e.g. achieve minimal rates of reuse and recycling and reuse/recovery equivalent to the targets set in the Directive). No information about market distortions was available. For period 2011-2014, no changes in the structure of motor vehicle dealing, ELV treatment or recovery liable to cause competition distortion between or within Member States were observed.

The economic recession influenced the **Hungary's** ELV market. The average age of vehicles on the market rose from 10 years in 2006 to 13 years in 2013. The number of ATFs on the market decreased, indicating illegal dismantling.

The implementation of Directive 2000/53/EC and corresponding regulations led to enhanced competition in **Ireland**. The number of ATFs increased from 53 in 2003 to 173 in 2013.

Luxembourg stated that after introducing a €750 premium for low-emission vehicles in 2007, net sales of passenger cars with emissions of <120 g CO₂/km increased. Due to the introduction of a "scrappage premium", the net number of ELVs also increased.

In 2010, a second depollution facility for ELVs was set up in Luxembourg. There are no shredders or post-shredder waste treatment facilities in Luxembourg. ELVs from Luxembourg are treated mainly at facilities in Belgium and Germany. The Environment Agency does not have any data on competition distortion. In 2012, the recycling rates were met due to the investment in the recycling sector.

For the period 2008-2011, **Latvia** provided no information at all. In the report from 2011-2014, Latvia acknowledged that the vehicle treatment sector is highly sensitive to changes because it depends on profitable prices of secondary material. However, no information is available on changes in the motor-dealing sector and no significant changes are forecast for restructuring Latvia's motor vehicle collection, dismantling, shredding, recovery and recycling industries.

For the period 2008–2011, **the Netherlands** stated that *“the only observable (international) trend is the exports of cars (not vehicles) to Eastern European countries”*, which have a clear impact on the number of scrap vehicles in the Netherlands.

For periods 2008-2011 and 2011-2014, **Poland** reported figures on vehicles sold new and imports of used cars (see Table 13). Additionally, in the latter report, Poland mentioned that Member States often apply the producer responsibility principle only to vehicles that were imported or brought into Poland new (and were recorded as such). As a result, producer responsibility for some vehicles is enforced in the country in which they were first placed on the market, whereas they are actually dismantled in the countries in which they end up as a used vehicle in the context of an intra-Community acquisition.

This inconsistency for who enforces ELV dismantling for exported vehicles is quite relevant for Poland since the amount of used car imports is twice the amount of new car sales. According to the European Commission's [press release from 22.03 2012](#), Polish legislation asks end-users, small scale operators and individuals importing vehicles to contribute to the environmental fund, while the Directive states that only car manufacturers and professional importers should be responsible¹³.

Table 13: Vehicles brought into Poland and new vehicles sold, as reported by Poland

Year	New cars sold	Vehicles brought into Poland		
		Total	from non-Member States	from other Member States
2008	378 000	1 103 970	33 223	1 070 747
2009	360 000	693 324	15 326	677 998
2010	330 000	718 286	9 800	708 406
2011	275 000	655 314	6 249	649 065
2012	271 000	657 392	4 959	652 433
2013	331 000	711 865	5 716	706 149

Whilst at the end of 2005 **Portugal** only had 11 companies that were licensed to receive end-of-life vehicles, at the end of 2011, 178 facilities existed. This number is considered sufficient to adequately manage all end-of-life vehicles generated in Portugal, making Portugal self-sufficient in this respect.

Portugal successfully reduced competition from illegal treatment facilities through the following measures:

- annual road tax (Imposto Único de Circulação - IUC),
- Scrappage Incentive Programme,
- higher taxation, and
- the National Plan for the Eradication of Illegal Scrapping, as referred to in the Annual Reports in the context of Commission Decision No 2005/293/EC of 1 April 2005.

¹³ Poland amended its legislation in 2015, abolishing recycling fees and amending other articles to align national laws with the ELV Directive. The amended law entered into force on 1 January 2016.

During the period 2008-2011 in Portugal, the System for Issuing Certificates of Destruction for End-of-Life Vehicles project was started (SECD). This project aims to provide a centralised computer system for issuing certificates of destruction for Portugal's ELVs and is currently in its final stages. SECD is also part of the system for monitoring the materials and components resulting from depollution and dismantling. Certificates will no longer be issued by the operators' own systems and will now be exclusively issued by this system. This enables the Portuguese Environment Agency (APA), as the responsible authority, to have greater control over the issuing authorities and the total number of certificates of destruction issued, and to produce statistics more quickly about managing ELVs in Portugal.

Summary

The majority of Member States did not report noticing any competition distortions between Member States or did not collect data on this issue. Some changes have been reported, mainly in regard to the economic crisis, illegal dismantling and established scrapping incentives.

Several Member States still report extensive exports to Africa, the Middle East and Eastern European countries, which impact ELV generation and the quality of vehicles to be depolluted and processed in the respective Member States (also in the neighbouring countries). Poland, as one of the receiving countries, reported that producer responsibility is usually only applied to vehicles that have been brought into their country new, signalling that importing countries have a disproportional burden with for treating ELVs.

Belgium is concerned that differences in interpreting the Directive could lead to a shift in the ELV destinations for shredding. This affects the separation of glass waste (BE) and how metal content is estimated. Sweden also mentioned glass waste recovery for the period 2005-2008 but ignored it in later reporting periods from 2008-2014.

Some Member States reported that, due to the economic crisis, the market for new cars decreased considerably in 2008-2011 and slowly increased again between 2011 and 2014. The increased use of old cars had a considerable impact on the ELV treatment. In Hungary, the number of ATFs on the market decreased, thus favouring illegal dismantling. Some measures were taken by Member States to combat illegal trade and dismantling of ELVs. In Denmark, only the last registered owner can receive the premium when delivering an ELV to an ATF. In Spain the majority of not authorised treatment facilities ceased their activity because they cannot issue certificates of destruction. Similarly, Portugal took great efforts since 2008 to combat illegal operators and initiated several programmes, including a project to have more control over the issued certificates of destruction.

Although electric mobility in Germany more than doubled from 2011 to 2014, the change in mobility options has not yet directly impacted ELV generation and the ELV recycling rate. In Luxembourg, a €750 premium for low-emission vehicles in 2007 led to a net increase in sales of passenger cars with emissions of <120 g CO₂/km.

In 2009, Germany introduced a scrappage premium which resulted in increased temporary storage, a surplus of spare parts on the market, a drop in the market price for stripped vehicles and an increased proportion of ELVs as shredder input. In 2009, four times more ELVs were generated in Germany than the year before. Between 2011 and 2014, the market normalised to pre-2009 levels.

7 Unknown whereabouts of ELVs

Although the Directive's legal provisions have been fully transposed into national legislation in Member States, evidence suggests serious implementation and enforcement deficits. Assessments on behalf of the Commission suggest that there may be 3.5 to 4.5 million vehicles per year with unknown whereabouts¹⁴. These 'missing cars' are deregistered in the countries but are not reported to the Commission as treated ELVs and are also not found in the numbers of legal exports of second-hand vehicles in the Foreign Trade Statistics.

This 'statistical gap' most likely results from a combination of factors that include:

- inadequate follow-up of deregistered cars within countries (e.g. in case of temporary deregistration) or in the case of intra-EU trade where national vehicle registration authorities lose trace of the vehicles;
- ELV dismantling within the EU in non-authorised treatment facilities; and
- the unregistered export of used cars or ELVs

among other factors.

Unfortunately, national implementation reports do not help elucidate the reasons for missing ELVs nor identify effective countermeasures. The problem of ELVs' unknown whereabouts is not directly addressed in this implementation questionnaire; accordingly, the countries did not provide coherent descriptions of the problem. Related information, if provided at all, is scattered across different sections of the implementation reports. The main section for describing implementation problems is question 2.10, which addresses market structures and competition distortions (see chapter 6.10). Information on the deregistration process and issuing CoDs is found under question 1.9 (see chapter 5.7). The problem of illegal treatment may also be addressed under question 2.3 which asks for the number of authorised treatment facilities (chapter 6.3). The available information is summarised in the following paragraphs.

Inadequate follow-up of deregistered cars

The key element for tracking ELVs is the requirement that the presentation of a CoD shall be the condition for the de-registration of an end-of life vehicle (Article 5(3)). Formally, this provision is transposed in all Member States except for Belgium, where the legal basis for this requirement is prepared but was not yet in force in the reporting period. However, legal transposition of the requirement obviously does not ensure that the provision is effectively applied in practice. This is reflected by the fact that the number of CoDs deviates from the number of ELVs in several countries¹⁵. In most cases the number of ELVs is higher than the number of CoDs issued, although in a few countries it is the other way round.

A CoD shall in principle be issued by an authorised treatment facility upon transfer of the car. However, Member States may also permit producers, dealers and collectors to issue CoDs on behalf of the ATF, provided that they guarantee the transfer of the vehicle to an ATF. Fourteen Member States made use of this clause between 2008 and 2014, compared to nine countries in the period 2005-2008.

A possible reason for the inadequate follow-up of ELV deregistration and ELVs' unknown whereabouts may be national authorities' division of competencies. The authorities for the environment are responsible for setting up the deregistration system, whereas national authorities for transport handle

¹⁴ For reference years 2012 and 2013: Preliminary results of the assessment carried out under Task 3.1 of the present study, based on the Foreign Trade Statistics (FTS) for extra-EU-trade and data from the European Automobile Manufacturers' Association (ACEA), and Eurostat databases on ELVs. Some missing data of minor relevance for the new registrations and vehicle park were added from other sources (Eurostat, POLK).

¹⁵ Differences between CoDs and ELVs occur in at least 11 countries (see validation report 2013). The real number of countries concerned is certainly higher.

vehicle registration and re-registration. Strong task coordination between the involved authorities as well as effective organisation of the registration process are important conditions for tackling the problem. However, the implementation reports do not address the interactions between the involved institutions. Although some countries, like Italy or France, provided detailed descriptions of the deregistration process, country statements do not reveal possible shortcomings of the deregistration system that might lead to the above-mentioned discrepancies.

Treatment of ELVs in non-authorised treatment facilities

ELVs cannot be tracked in official statistics when they are illegally treated in non-authorised treatment facilities. A few countries, including Portugal, Spain, Hungary and Denmark, mentioned the problem of illegal treatment and actions to tackle the problem in their implementation reports. Information from further countries is available from other sources.

Portugal reported to have successfully reduced ELV treatment by non-authorised treatment facilities through a package of measures, including an annual road tax, a scrappage incentive programme, increased taxation and a National Plan for the Eradication of Illegal Scrapping. At the same time, the number of ATFs in Portugal has considerably increased from only 11 at the end of 2005 to 188 in 2013, which is considered sufficient to adequately manage all ELVs generated in Portugal. **Spain** indicated that the majority of non-authorised treatment facilities had closed because they could not issue CoDs. In contrast, **Hungary** reported that the number of authorised treatment facilities has fallen and illegal dismantling is increasing as a result of the economic recession after 2008. **Ireland** increased the number of ATFs from 53 in 2003 to 173 in 2013. Stricter enforcement of Ireland's law on scrap yards has seen the number of unauthorised facilities fall from 329 in 2008 to 20 in 2011¹⁶. In the **UK**, a coordinated national campaign to tackle illegal ELV and scrap metal sites, including hard penalties, was launched in April 2008 by the UK Environment Agency. In the first 12 months of the campaign, almost half of the 370 identified illegal facilities were closed or brought into regulation¹⁷. **France** and **Sweden** also took repressive actions against illegal treatment and/or have intensified controls on ELV treatment facilities. **Denmark** fights the trade and illegal treatment of ELVs by paying a premium that only the last registered owner can receive. The ENVI-report from 2010¹⁸ states more generally that "*Member States where a funded system (such as the **Netherlands, Denmark, Sweden**) has been established for quite a long time illegal dismantlers were progressively replaced by authorised treatment facilities, mainly in order to be able to beneficiate from financial support.*"

The implementation reports do not include any information that would allow assessing the impact of illegal ELV treatment on the total number of ELVs.

Unregistered export of used cars or ELVs

Unregistered exports are frequently mentioned as an important reason for missing ELVs. However, the implementation reports do not provide substantial information to support this assumption. The high number of exports and the related decrease of ELVs treated in the countries are mentioned by Belgium, Germany and the Netherlands. **Belgium** pointed out that "*the extensive export of (second-hand) vehicles to Africa (and the Middle East), often also from Belgium (port of Antwerp)*" has a strong impact on the quantity of vehicles to be depolluted and processed. **Germany** and **the Netherlands** stated that exports to Eastern European countries result in a comparably low number of ELVs treated in the two countries. However, the all of these remarks refer to the export of second hand cars rather than to the illegal export of ELVs.

Action against illegal exports is reported from two countries (**Austria** and **Belgium's Wallonia region**). Both countries made the Correspondents' Guidelines No. 9 on the shipment of waste vehicles part of their inspection documents.

¹⁶ Environmental News Daily (ENDS) from 29.05.2014

¹⁷ ENVI, 2010: End of life vehicles: Legal aspects, national practices and recommendations for future successful approach. Study for the European Parliament's Committee on Environment, Public Health and Food Safety

¹⁸ *ibid.*

8 Summary and Conclusions

This report is based on the assessment of the implementation reports of EU Member States for the two reporting periods 2008-2011 and 2011-2014. For the period 2008-2011, reports were submitted by all Member States; for the period 2011-2014, the reports from Spain and the Netherlands were missing. Reporting punctuality and quality of the implementation reports improved compared to previous reporting periods and was mostly satisfactory.

Directive 2000/53/EC on end-of-life vehicles is correctly transposed into national legislation in all Member States. The correct transposition was confirmed by conformity checks carried out in 2004 and 2007 for most of the Member States. The few remaining cases of non-conformity have been resolved and all infringement procedures are closed.

With only two exceptions, the Member States met the reuse and recycling target of 80% and the reuse and recovery target of 85% in 2013. The two countries that failed were close to the targets and had already reached the targets in previous years. Most of the countries have achieved reuse and recycling rates that are close to or already above the 85% target that was valid as of January 2015. Achieving the 2015 reuse and recovery target of 95% is, however, challenging for several countries.

Quantitative information on the use of recycled materials and the market situation for recycled materials is rather poor. Member States agree that the metal trade market functions for ferrous and non-ferrous metals, such that high recycling rates for metals are ensured. The plastic recycling market is more heterogeneous. The use of recycled plastic materials in vehicles, though increasing, still remains relatively low.

The majority of countries indicated that end-of-life vehicles have a positive market value as long as they are delivered complete and are not stripped of essential components. Nevertheless, eight countries reported that vehicles having no or a negative market value have been collected in the respective period.

The infrastructure for ELV treatment has improved during the period 2008-2014. In most Member States, the number of authorised treatment facilities increased and the differences between the countries with regard to the density of the treatment network have diminished. Altogether, nearly 13 000 collection and treatment facilities exist, which corresponds to about one facility for every 40 000 inhabitants.

The total volume of vehicles transferred to ATFs in the EU rose sharply from 6.3 million tonnes in 2008 to 9 million tonnes in 2009. The primary cause for this increase was the introduction of scrapping incentives schemes in more than 10 EU Member States in the years 2008 and 2009. After 2009, the number of vehicles transferred to the ATFs decreased stepwise to 6.2 million vehicles in 2013, which corresponds to the level before the financial crisis.

Member States did not report serious competition distortions between or within the countries. For the period 2008-2011, the vehicle market was strongly influenced by the financial crisis and the scrapping incentives introduced in Member States to stabilise the car market.

Although the Directive's legal provisions have been fully transposed into national legislation, the significant number of ELVs with unknown whereabouts reveals serious implementation and enforcement deficits. The assumed reasons for the 'missing' vehicles are the dismantling in non-authorised treatment facilities, the unregistered export of used cars or ELVs and the inadequate follow-up of deregistered cars.

Unfortunately, the national implementation reports do not help to shed light on the problem. Although information from the countries' data quality reports suggests that in several Member States serious differences exist between the number of CoDs issued and the number of ELVs, none of the countries clearly addresses the problem in their implementation reports. Some related information (mainly information on illegal treatment of ELVs) is provided by some countries. The available information indicates that several countries have taken action against non-authorised treatment facilities. Two

countries try to fight the illegal export of ELVs by applying the Correspondents Guideline No. 9 on shipment of vehicles. The implementation reports do not provide substantial information about whether the deregistration process and the collaboration between the different authorities is organised in a way that proper follow-up can be ensured.