Study on "Implementation report for the ELV Directive"

Final Report

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Executive summary

1.1 Completeness assessment

Reponses provided by MS were assessed for completeness in terms of the number of questions answered and the number of questions for which answers provided were sufficient to assess the level of implementation. Overall MS provided responses for the large majority of questions, with the lowest number of questions answered being 33 (FR) and the second lowest being 77 (LT). In total 17 MS replied to all 85 questions examined.

In terms of the satisfactory nature of answers provided, figures varied more widely, with the lowest values observed being France (32) and Lithuania (68). In the case of France, a document summarising information on the implementation of the ELV Directive in France was provided rather than the questionnaire. Romania, the Netherlands, Greece and Cyprus were the only four MS to have responded to all 85 questions satisfactorily.

It can be concluded that the primary issue in terms of completeness of the questionnaires was not a lack of responses but rather a lack of satisfactory responses which would allow for an assessment of the level of implementation. This was often due to the fact that insufficient information or detail was provided or that information furnished by MS was off topic.

1.2 Implementation of main provisions

Six key provisions were selected for detailed analysis, based on questionnaires provided by Member States, additional research undertaken by the project team and in coordination with the Commission. The key provisions selected are:

- **Waste prevention:** encouragement of prevention in terms of limiting hazardous substances, designing vehicles to facilitate re-use, and integrating an increasing quantity of recycled materials – Article 4(1)
- **Collection:** producer responsibility for the organisation of a takeback system and covering the costs of collection – Articles 5(1) and 5(4)
- **Deregistration:** deregistration of vehicles and issuing of certificates of destruction – Articles 5(3) and 5(5)
- **Treatment:** permitting for treatment operations and proper treatment conditions to be fulfilled – Articles 6(2) and 6(3)
- **Re-use and recovery:** encouragement of re-use and recovery and fulfilment of targets – Articles 7(1) and 7(2)
- **Coding standards/dismantling information:** producer obligation to use component and material coding standards and provide

dismantling information to facilitate re-use and treatment - Articles 8(1), 8(3) and 8(4)

The analysis of the main provisions was carried out using the MS questionnaires and integrating any additional information or clarification provided by MS. Sub-questions, answerable with Yes, No, Partly or Unclear were created under each main provision. For example, for the first provision, waste prevention, aligned with Article 4.1, the following sub-questions were used:

- Have measures been put in place to limit the use of hazardous substances?
- Have measures been put in place to facilitate the dismantling, re-use, recovery and recycling of end-of-life vehicles?
- Have measures been put in place to integrate an increasing quantity of recycled material in vehicles or other products?

The responses to each question were aggregated at the level of each main provision and overall for the six main provisions examined, to provide a global assessment.

Article 4.1 on waste prevention was assessed as being fully transposed in 18 MS, while Articles 5.1 and 5.4 on the collection of ELVs were considered to be fully transposed in 19 MS. As for Articles 5.3 and 5.5 on the deregistration of ELVs, 20 MS were considered as having fully transposed relevant provisions. Articles 6.2 and 6.3 on the treatment of ELVs were considered to be fully assessed in 21 MS. Re-use and recovery provisions in Articles 7.1 and 7.2 were fully transposed by 17 MS and coding standards and dismantling information for ELV in Articles 8.1, 8.3, and 8.4 were determined to be fully transposed in 22 MS.

1.3 Overall implementation

The ELV Directive was assessed as being fully implemented in relation to the key provisions examined in eight MS: Belgium, Finland, Ireland, Italy, Luxembourg, Malta, the Netherlands and the United Kingdom.

The Directive was considered to be partly implemented in 18 MS, including Austria, Bulgaria, Cyprus, the Czech Republic, Germany, Denmark, Estonia, Spain, Greece, Hungary, Lithuania, Latvia, Poland, Portugal, Romania, Sweden, Slovenia, and the Slovak Republic. In the case of one MS, France, implementation was deemed unclear based on the information and documents provided.

For a number of MS where implementation was considered partial, this was due to uncertainty of the application of certain provisions based on the information provided; only portions of the implementation were therefore able to be verified. Partial implementation issues were primarily related to vehicle deregistration (Articles 5.3 & 5.5) and re-use and recovery (Articles 7.1 & 7.2). Uncertainty in relation to implementation was most commonly identified in relation to provisions on waste prevention (Article 4.1) and treatment (Articles 6.2 & 6.3).

Some of the results above may be surprising in light of other information known about MS and their ELV policies; for example, Sweden is known as a positive example of the implementation of ELV management practices. However, information provided via questionnaires on

implementation and other documentation were not sufficiently complete or clear to allow for an assessment of implementation as being fully completed in Sweden, so this result may not adequately emphasise the good efforts they have undertaken.

1.4 Evolutions in implementation

While it was difficult to comparatively assess the implementation of the six main provisions based on responses provided by MS to the 2008 reporting questionnaire and the 2011 reporting questionnaire, comparisons were sought between the two reporting periods in terms of implementation statistics. Figures such as the number of ELVs collected, the number of authorised treatment facilities, and achievement of targets for re-use, recycling and recovery were examined over the two periods.

The ratio of vehicles collected per inhabitant and treatment centres per inhabitant has decreased from 2008 to 2010, suggesting that the availability of treatment centres has increased and by consequence, the number of vehicles collected.

Re-use, recovery and recycling rates reported by MS from 2006 up to 2010 show an increasing trend, with more and more MS surpassing the minimum targets. However, target achievement remains a challenge for some MS, notably in 2010 for Estonia and Ireland who achieved re-use and recovery and re-use and recycling rates below targets set out in the ELV Directive.

Chapter 2: Introduction

Each year, three billion tonnes of waste are produced in the EU, approximately 90 million tonnes of which are hazardous waste.[1] This amount translates to six tonnes of solid waste per capita[2], or the equivalent of a large truck. In order to address the waste of precious resources and threats to the environment and public health that such quantities of waste represent, the EU's Sixth Environment Action Programme (6EAP) includes objectives for the prevention, reduction and safe management of waste, with the ultimate goal of decoupling economic growth and environmental pressures. This consideration is echoed by Europe 2020, the EU's growth strategy from 2010 to 2020. A resource-efficient Europe, one of the flagship initiatives of the Europe 2020 Strategy, highlights waste prevention and using waste as a resource as important for moving Europe towards greater resource efficiency and achieving decoupling of economic growth from waste generation and resource consumption.

The EU's approach to waste management is based on three principles[3]:

- **Waste Prevention:** Waste prevention is the most desirable path to decoupling economic activity from waste generation as it reduces resource use and avoids environmental and public health problems from arising in the first place. It is therefore a key factor in the EU's waste strategy. Waste prevention objectives should be considered throughout the manufacturing process and along the entire supply chain.
- **Recycling and Re-use:** In addition to preventing waste generation in the first place, as many of the materials as possible should be recovered and recycled. The EU Commission has defined and designated several specific 'waste streams' for priority attention, including those with particularly high volumes or significant harmful environmental and/or health risks, including packaging waste, end-of-life vehicles, batteries, and electrical and electronic waste.
- **Improving final Disposal and Monitoring:** Whenever waste cannot be prevented or recycled or the required procedures are not economically feasible, the waste must be treated safely in incinerators and landfilled only as a last resort, due to the inherent risks to the environment and health. Both of these methods require close monitoring because of their potential for causing significant environmental damage. For this purpose, the EU has put in place the Landfill Directive (99/31/EC) which establishes guidelines for

[1] http://ec.europa.eu/environment/waste/index.htm (accessed May 7, 2012)

[2] Ibid.

[3] Ibid.

landfill management and the IPPC Directive (96/61/EC) which sets limits on pollutant emission levels from incinerators, especially highly toxic gases such as dioxin and acidifying gases.

2.1.1 End-of-Life Vehicle Directive

Within the context of the waste policy principles of the 6EAP, the EU has declared the goal to limit the production of waste arising from end-of-life vehicles by increasing the rates of re-use, recycling and other forms of recovery of end-of-life vehicles and their components.

In order to achieve these objectives, the EU Commission, among other actions, created Directive 2000/53/EC[4] on End-of-Life Vehicles, which places the responsibility primarily on vehicle manufacturers (but also on Member States' national governments for creating the necessary framework conditions) to increase the share and feasibility of components that can be recycled.

This Directive specifically covers[5]:

- Motor vehicles with at least four wheels for transporting passengers and with a maximum of nine seats (category M1);
- Motor vehicles with at least four wheels for transporting goods which weigh no more than 3.5 tonnes (category N1); and
- Three wheel motor vehicles.

This Directive aims to decrease the quantity of waste arising from vehicles. It, therefore, encourages vehicle manufacturers and importers of vehicles into the European Union to:

- Limit the use of hazardous substances in their new vehicles;
- Design and produce vehicles which facilitate re-use and recycling;
- Develop the integration of recycled materials.

In addition, the use of mercury, hexavalent chromium, cadmium and lead (all carcinogens and/or neurotoxins) in the components of vehicles placed on the market has been prohibited since 1 July 2003. However, these substances may be used for certain applications if the use of these substances is unavoidable (see Annex II to the Directive 2000/53/EEC).

2.1.2 ELV Directive Implementation Challenges

The ELV Directive was implemented in two phases. While in a first phase only those vehicles registered after July 1st 2002 fell under the extended producer responsibility (EPR) obligations in the Directive, in the second phase, as of January 1st 2007, all vehicles a given producer had ever introduced on the market place fell under the EPR obligations.

[4] http://europa.eu/legislation_summaries/environment/waste_management/l21225_en.htm (accessed May 7, 2012).

[5] Ibid.

Many European countries encountered difficulties in implementing the ELV Directive. The main obstacles identified are outlined below:[6]

- **The quality of existing means of recycling and waste treatment:** waste management for ELV before the introduction of the ELV Directive differed greatly from one country to another and were not necessarily aligned with the objectives of re-use, recycling and treatment of end-of-life vehicles as dictated in the Directive.
- **The compliance of treatment facilities:** ELV processing facilities existed prior to the implementation of the ELV Directive in order to recover parts, components of fluids (e.g. fuel) which had a market value. However, these facilities were not necessarily prepared to comply with the requirements of the Directive (waterproof surfaces, storage facilities and appropriate containers, waste treatment equipment), especially in countries where no regulations for these type of facilities were in place at the time the ELV Directive was implemented.
- **Increased costs of treatment:** the ELV Directive treatment targets (stripping, decontamination, dismantling) result in increased costs of vehicle processing;
- **Administrative burdens:** the ELV Directive requires the creation of new national systems (certification for treatment facilities, management of destruction certificates) which did not previously exist for some countries.

[6] European Parliament, Policy Department-Economic and Scientific Policy, End of Life Vehicles (ELV) Directive - An assessment of the current state of implementation by Member States (2007)

Chapter 3: Objectives and scope of the study

The objective of the current project is to assess the implementation of Directive 2000/53/EC on End-of-Life Vehicles (ELV Directive) for the period 2008-2011. Member States are obliged to prepare reports on the state of implementation of the requirements for the ELV Directive at three-year intervals as specified in Article 9 of the Directive. Commission Decision 2001/753/EC defines the questionnaire to be used for reporting and describes reporting requirements in detail.

The analysis and summary of Member State responses to this questionnaire at three-year intervals allows the Commission to regularly evaluate the overall state of implementation, identify information gaps, and diagnose the further need for policy action.

Reports have been prepared for two previous implementation periods for the ELV Directive. The current report seeks to:

- assess the completeness of the national implementation questionnaires;
- analyse the implementation of key provisions of the ELV Directive;
- provide a general conclusion on the implementation of the ELV Directive in the EU-27;
- compare implementation levels for the 2005-2008 period with the 2008-2011 period.

Chapter 4: Methodological approach

This chapter provides a reference for the steps taken to assess the completeness of the questionnaires and the overall level of implementation of the ELV Directive across the Member States. It covers:

- a description of technical issues necessary for the generation of the evaluation tables ;
- a description of the strategy used for the completeness assessment.

To facilitate analysis and assessment of the translated questionnaires which were provided by the European Commission, the questionnaire responses provided by MS have been aggregated into a summary table. In essence the contents of the individual reports were compiled so that the 27 responses that were given to each question item by the MS could be viewed in a single table and be compared directly, presented in MS-Excel. The following paragraphs illustrate the individual steps taken to generate the summary table; if desired, the intermediate files used for the preparation of the table are available upon request.

Initially the 27 questionnaires were provided to BIO after translation by the Commission. Due to different reporting styles in the Member States and varying translation customs, the documents differed considerably with regard to file format and layout. While the majority of documents were prepared using MS-Excel, some were provided as MS-Word or PDF files. To allow for aggregation into a common table, the differing formats had to be harmonised across all 27 questionnaires and aligned with the 90 question fields provided for in the standard questionnaire model.

The harmonised summary table was prepared in an Excel workbook, with columns describing countries and rows designating question items. An additional "Status" column was added for each question item in order to check for completeness and data sufficiency, and where necessary capture possible comments or questions for clarification. Figure 1 is a screenshot from of a portion of the summary table, illustrating the resulting format.

Figure 1: Structure of an evaluation template in the common table

	A	L	M	N	O
1					
2		CY		CZ	
3		Response	Status	Response	Status
4	1. Incorporation into National Law				
8	Your email address	cconstantinou@ems.mcw.gov.cy	ok	marek.livora@mzp.cz	ok
9	Your Phone Number (+International Dialling Code - Local Number) Example: +32 2 1234567	35 722 800 559	ok	+420 267 122 687	ok
10	1.1. Has the Commission been provided with the national laws and regulations which implement Directive 2000/53/EC into national law?	Yes	ok	Yes	ok
	1.1.1. If the answer to question 1.1. is 'Yes', please provide details.	Law Title: "The Vehicle's End of Life Law of 2003, Number L.157(I)/2003, Published in the Cyprus Government Official Journal numbered 3758, of 03.10.2003, in Annex I, Part I. Transmitted to the Commission Services on 31/03/2004, MNE (2003° 56055. Also, "The Motor Vehicles and Road Traffic (Amending) Law of 2003", Number L.146(I)/2003,	ok	Full notification 16 March 2005. For other legislaton which has been amended since that date, see sheet 1.1.1.	What is the name of the Czech piece of legislation which implemented the Directive 2000/53/EC? When was it implemented? Please provide the specific law.

The summary table was then assessed in order to complete the "Status" column. Where MS responses were deemed complete and sufficient the "Status" field was marked "ok". Where issues were detected or additional information and clarification was needed, key questions or comments for MS were registered in the status column.

For MS for which additional information or clarification was deemed necessary, the column containing the original questions posed by the Commission, the responses of the MS and the "Status" column were extracted and inserted into a separate Excel spreadsheet. An additional column was added to the right of the three above-mentioned columns and titled "Additional information" as a space where MS representatives could provide additional information and responses to the project team's questions.

In each case the spreadsheet with these questions was transmitted to the designated MS contact (as indicated in the questionnaire responses). As the project was launched in mid-July, these queries were sent to MS at the end of July or early August. Due the holiday period, it was difficult to obtain responses from MS over this time. Therefore, additional follow up was carried out (via reminder emails and phone calls) up through mid-September in order to obtain a maximum of information for the implementation assessment. Following on the submission of the draft final report additional feedback was received from some Member States which was integrated into the final copy of the report.

It should be noted that in some cases MS have not provided contact information as requested in the ELV reporting questionnaire. In these cases, other ministry contacts were contacted in order to identify the person in charge of ELV implementation in the MS. All Member States were contacted via email and 16 were contacted via phone. 21 Member States provided a reply by 1 October 2012. Following the preparation of the draft version of the final report those MS where the implementation of a number of provisions was unclear were recontacted; this led to responses from 4 MS.

Figure 2: Structure of a table requesting additional MS input

	A	B	C	D
1	COMMISSION DECISION (2001/753/EC) concerning a questionnaire for Member States reports on the implementation of Directive (2000/53/EC) on end-of-life			
2		Cyprus		
3		Response	Status	Additional Information
4	1. Incorporation into National Law			
5	Institution/Organisation you are representing	Department of Electrical and Mechanical Services, Ministry of Communication and Works	ok	
6	Country your Organisation is representing	Cyprus	ok	
7	Your Name (Family Name, Surname) Example: Einstein, Albert)	Constantinou, Constantinos	ok	
8	Your email address	cconstantinou@ems.mcw.gov.cy	ok	
9	Your Phone Number (+International Dialling Code - Local Number) Example: +32 2 1234567	35 722 800 559	ok	
10	1.1. Has the Commission been provided with the national laws and regulations which implement Directive 2000/53/EC into national law?	Yes	ok	
11	1.1.1. If the answer to question 1.1. is 'Yes', please provide details.	Law Title: "The Vehicle's End of Life Law of 2003, Number L.157(I)/2003, Published in the Cyprus Government Official Journal numbered 3758, of 03.10.2003, in Annex I, Part I. Transmitted to the Commission Services on 31/03/2004, MNE (2003' 56055. Also, "The Motor Vehicles and Road Traffic (Amending) Law of 2003", Number L.146(I)/2003, Published in the Cyprus Government Official	Has this legislation been amended? Please provide details if relevant.	

Upon the receipt of MS responses to the additional questions, a new "Status" column was added to the table to the right of the previous columns, in order to assess the sufficiency of the additional information provided by MS. Similarly to the initial "Status" field, this column was filled in with "ok" or with additional questions, as can be seen in the figure below.

Figure 3: Structure of a table requesting further additional MS input

	A	C	D	E	F	G
1	COMMISSION DECISION (2001/753/EC) concerns reports on the implementation of Directive (2000/53/EC) on end-of-life vehicles					
2		Austria				
3	Corresponding questions	Response	Status	Additional Information	Status	
17	1.5. Have the necessary measures pursuant to Article 4(1) been taken?	Yes	ok		ok	
18	1.5.1. If the answer to 1.5 is 'Yes', please provide details.	In particular when end-of-life vehicle collection and recycling systems are approved, avoidance measures are regularly also called for.	Please indicate the specific text by which necessary measures pursuant to Article 4(1) were taken.	AWG 2002, § 29 Abs. 4: „ Die Einrichtung, der Betrieb und die wesentliche Änderung eines Sammel- und Verwertungssystems ist zu genehmigen, wenn zu erwarten ist, dass 1. .... 4. das Sammel- und Verwertungssystem die Vermeidung von Abfällen durch Aufwendung von	Please provide a translation of the relevant parts in English.	
19	1.5.2. If the answer to 1.5 is 'No' please state the reasons why.		ok		ok	
20	1.6. Have the necessary measures pursuant to Article 4(2)(a) been taken?	Yes	ok		ok	
21	1.6.1. If the answer to 1.6 is 'Yes', please provide details.	§ 4 of the Altfahrzeugeverordnung takes over the requirements of Article 4(2)(a) of the Directive.	Please provide the specific text by which necessary measures pursuant to Article 4(2)(a) were taken.	AltfahrzeugeVO, § 4: „Vermeidung § 4. (1) 1. Werkstoffe und 2. Bauteile von Fahrzeugen, die nach dem 1. Juli 2003 in Verkehr gesetzt werden, dürfen kein Blei, Quecksilber, Kadmium oder sechs-wertiges Chrom enthalten, außer in den in der Anlage 2 genannten Fällen und	Please provide a translation of the relevant parts in English.	

In some cases, MS representatives were asked to provide copies of their national legislation which implemented the ELV Directive, as it was not possible to directly assess from their

questionnaire responses the level of implementation of the various provisions. While copies of national legislation in English were sought, such documents were not always available. In these cases either BIO team members helped with translation from their native language to English, or translations were sought using online translations tools.

For the completeness analysis and the implementation assessment, any additional information provided by MS in terms of national legislation or other implementation documents was integrated into their response table. To allow for a comparative analysis since the last reporting period, the 2008 questionnaire responses were integrated to the left of the 2011 questionnaire responses[7]. Two additional columns were added to the right of the existing information to assess the completeness and sufficiency of MS responses. In the first column, it was assessed if MS had provided a response to the question, resulting in a yes or no response. A second column assessed the sufficiency of the response provided in terms of allowing an assessment of the implementation level for the article in question. This second column was supplied with an ok or no response. The number of questions considered as answered or satisfactorily answered were measured out of 85 (thereby excluding the five contact information-related questions at the beginning of the implementation questionnaire). Key provisions not answered and key unresolved issues were flagged. The final completeness table can be found further below in Table 9.

Figure 4: Structure of an assessment table

	A	B	C	H	I	K
1	COMMISSION DECISION (2001/753/EC) concerning a questionnaire for Member States reports on the					
2		Austria				
3	Corresponding questions	Response from 2008	Response from 2011	Answer?	Satisfactory?	Comments
4	1. Incorporation into National Law					
11	1.1.1. If the answer to question 1.1. is 'Yes', please provide details.	The reaction occurred with enactment of the Act of 2002 Federal Law Gazette I No. 102/2002 and in particular by the included amending the Motor Vehicles Act § 43, the 1967th Furthermore, the ELV regulation was adopted for implementation (Federal Law Gazette II No. 407/2002) Notification displayed on 20 November 2002 GZ 4.12.1/29/02. The AltfahrzeugeVO was twice amended:	Transposition took place with the adoption of the 2002 AWG (Law on waste management) (BGBL. I No 102/2002) and in particular through its amendment of § 43 of the 1967 Kraftfahrgesetz (Law on motor vehicles). Transposition also took place with the adoption of the Altfahrzeugeverordnung (Regulation on end-of-life vehicles) (BGBL. II No	Yes	ok	The Regulation on end of life vehicles was amended for a 3rd time in 2010.
12	1.1.2. If the answer to 1.1 is 'No', please state the reasons why.			Yes	ok	
13	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?	No	No	Yes	ok	
14	1.3. If the answer to question 1.2 is 'Yes', please provide details.			Yes	ok	
15	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?	No	No	Yes	ok	
16	1.4.1.If the answer to 1.4 is 'Yes', please provide details.			Yes	ok	

[7] It was only possible to obtain 20 reports from 2008 in English; 4 were not available and 3 were only available in native languages.

Chapter 5: Completeness assessment

The final completeness assessment can be found in the table below. As indicated above, this assessment takes into account initial questionnaire responses provided by MS, as well as any additional information provided in relation to questions for clarification sent to MS. Key or main provisions selected, as discussed further in Chapter 6: Main provisions, were the following:

- **Waste prevention:** encouragement of prevention in terms of limiting hazardous substances, designing vehicles to facilitate re-use, and integrating an increasing quantity of recycled materials – Article 4(1)
- **Collection:** producer responsibility for the organisation of a takeback system and covering the costs of collection – Articles 5(1) and 5(4)
- **Deregistration:** deregistration of vehicles and issuing of certificates of destruction – Articles 5(3) and 5(5)
- **Treatment:** permitting for treatment operations and proper treatment conditions to be fulfilled – Articles 6(2) and 6(3)
- **Re-use and recovery:** encouragement of re-use and recovery and fulfilment of targets – Articles 7(1) and 7(2)
- **Coding standards/dismantling information:** producer obligation to use component and material coding standards and provide dismantling information to facilitate re-use and treatment - Articles 8(1), 8(3) and 8(4)

A legend as well as commentary on the results of the completeness assessment are provided below the table.

Table 1: Final completeness assessment table

Member State	*How many questions answered?*	*How many questions answered satisfactorily?*	*Key unresolved issues*
AT	85	83	No information provided on the measures taken in relation to waste prevention for ELVs.
BE - W	85	84	Some uncertainty on regional legislation and the focus on using recycled materials.
BE - F			
BE - B			
BG	85	82	The exact process of collection and deregistration is unclear as well as the role of producers.
CY	85	85	Based on the information provided the responsibility of producers for the collection and cost of takeback cannot be fully confirmed.
CZ	85	82	Some measures regarding waste prevention and encouraging recycling are partly implemented, mainly because the Czech Republic has no vehicle manufacturers. No information is provided on coding standards to facilitate reuse of components.
DE	85	84	
DK	84	74	It is not clear if the take back system put in place is free for vehicle owners, it is not stated if coding standards are compulsory and if producers are required to provide dismantling information to treatment facilities.
EE	85	84	
ES	84	80	Not enough information was provided on all the legislation transposing the ELV Directive.
FI	85	82	Statistical implementation data missing for certain years.
FR	33	32	Information missing on waste prevention, collection, deregistration, treatment, and dismantling information made available by producers to treatment centres.
GR	85	85	
HU	83	76	Insufficient detail provided on the adoption of derogations, information missing in relation to certain statistical implementation data, unclear if Articles 8.3 and 8.4 fully implemented.
IE	85	84	
IT	85	79	Statistical implementation data missing for certain years.
LT	77	68	Lack of information on provisions in Articles 5.3 (clause allowing other actors to issue certificates of destruction on behalf of authorised treatment facilities), Articles 5.5 and 6.3; unclear if provisions put in place in relation to limiting hazardous substances in Article 4.1.
LUX	85	80	Insufficient information provided in relation to Articles 6.1 and 6.4 to allow for an assessment of implementation.

Member State	*How many questions answered?*	*How many questions answered satisfactorily?*	*Key unresolved issues*
LV	83	75	Unclear if adequate availability of collection facilities provided for in relation to Article 5.1, if economic actors cover the majority of takeback costs in relation to Article 5.4, and if all conditions met in relation to permitting in Article 6.4. Only 2015 targets (not 2006) targets located in legislation provided. Statistical implementation data missing for certain years.
MT	85	84	
NL	85	85	
PL	85	82	Unclear if permitting conditions implemented in line with Article 6.3
PT	85	83	Unclear if Articles 6.1 and 6.3 implemented.
RO	85	85	
SE	84	81	Unclear if portions of Article 4.1 have been implemented, unclear if producers are responsible for the cost of the takeback system in Article 5.4, and unclear if Article 6.4 implemented.
SI	84	84	
SK	82	76	Uncertainty in relation to measures put in place to limit hazardous substances and increase the use of recycled materials in Article 4.1, in relation to the provisioning of an adequate network of treatment facilities in Article 5.1, in relation to the implementation of a permitting system in Article 6.2 and in relation to the adoption of articles 5.2 and 6.4.
UK	84	84	

Legend for "How many questions answered?"

85	Questionnaire responses complete (response of 85)
80	Questionnaire responses partly complete (response of 80 or above)
79	Questionnaire responses incomplete (response of 79 or below)

Legend for "How many questions answered satisfactorily?"

84	Questionnaire responses complete (response of 84 or above)
80	Questionnaire responses partly complete (response between 80 and 83)
79	Questionnaire responses incomplete (response of 79 or below)

For the field "How many questions answered?" a total of 85 was possible. The questionnaire contained a total of 90 questions; however, for the current exercise, it was considered that the first five questions related to contact information were not relevant as they did not provide information on the level of implementation of the Directive. Questions were considered to be answered if a text response was provided by the MS. For those follow up questions such as "1.5.2. If the answer to 1.5 is 'No' please state the reasons why." for which MS has replied yes and

provided detail, no response was necessary and hence these questions were considered by default as being answered.

For the field "How many questions answered satisfactorily?" satisfactorily was defined as at a level at which implementation of the provision could be assessed. Once again a total of 85 was possible. If it was possible to determine the level of implementation of a given provision from the information provided the question was considered to have been answered satisfactorily. If it was not possible to determine the level of implementation of a given provision from the information provided, the question was not considered to have been satisfactorily answered.

For the field "Key provisions not answered?" those key provisions for which insufficient information or insufficiently clear information was provided to allow for an assessment of the implementation level were listed. Within the field "Key unresolved issued" a summary of the problematic areas identified in the questionnaire was provided.

Overall MS provided responses for the large majority of questions, with the lowest number of questions answered being 33 (FR) and the second lowest being 77 (LT). In total 17 MS replied to all 85 questions examined. In terms of the satisfactory nature of answers provided, figures varied more widely, with the lowest values observed being France (32) and Lithuania (68). In the case of France, the questionnaire was not completed; a PDF document summarising information on the implementation of the ELV Directive in France was provided instead. However, unfortunately, the information provided in the PDF document often did not align closely with the provisions and specific questions in the questionnaire. For Lithuania, many responses made reference to previous documents submitted to the Commission but did not provide information on the level of implementation, meaning that it was not possible to assess the effective transposition of many key provisions. Romania, the Netherlands, Greece and Cyprus were the only four MS to have responded to all questions satisfactorily. It can be concluded that the primary issue in terms of completeness of the questionnaires was not a lack of responses but rather a lack of satisfactory responses which would allow for an assessment of the level of implementation. This was often due to the fact that insufficient information or detail was provided or that information furnished by MS was off topic or referred to documents which were not made available.

The analysis completed in relation to the main provisions is described in further detail with results in Chapter 6: Main provisions.

Chapter 6: Main provisions

Based on questionnaires provided by Member States and additional research undertaken by the project team, in coordination with the Commission, main provisions were selected for analysis. The key areas covered by these provisions are: waste prevention, collection, deregistration, treatment, re-use and recovery, and coding standards/dismantling information. Further information has been provided in the sections below on their selection as well as the current implementation status for each, by Member State.

The analysis of the main provisions was carried out using the MS questionnaires and integrating any additional information or clarification provided by MS, as outlined in Chapter 4: Methodological Approach. Sub-questions, answerable with Yes, No, Partly or Unclear were created under each main provision. The responses to each question were aggregated at the level of each main provision and overall for the six main provisions examined, to provide a global assessment. Figure 5 below illustrates the four potential responses used for the main provision analysis.

Figure 5: Legend for main provision analysis

YES	Fully implemented; all provisions implemented
NO	Not implemented; all provisions not implemented
PARTLY	Partially implemented; some but not all provisions implemented
UNCLEAR	Unclear if implemented, unable to be determined based on information provided

For the aggregation of the analysis completed for each sub-question, those MS with all YES responses received an overall YES, those with all NO responses received an overall NO and those with at least one PARTLY response received an overall PARTLY. For those with a majority of UNCLEAR responses, an overall UNCLEAR was assigned. The same principles were used to aggregate scoring across the six main provisions to arrive at an overall implementation status for each MS.

The below table is an example of sub-questions asked in relation to re-use and recovery (Articles 7.1 and 7.2).

Table 2: Sample main provision assessment table

	A	B	C	D
1	Member State	*Article 7.1 & 7.2* *Re-use and recovery: encouragement of reuse and recovery and fulfilment of targets*		
2		*Have measures been taken to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used and the giving of preference to recycling when environmentally viable?*	*Have measures been taken to ensure that re-use and recovery increases to a minimum of 85% by 1 January 2006 and to 95% by 1 January 2015 and that re-use and recycling increases to a minimum of 80% by 1 January 2006 and 85% by 1 January 2015 average weight per vehicle per year?*	*Overall implementation*
3	AT	PARTLY	YES	PARTLY
4		The legislation simply states that producers and importers must recycle components if not suitable for re-use. The transposition of this measure is mainly done through the targets set in accordance with Article 7(2).		
5	BE - W	YES	YES	YES
6				
7	BE - F	YES	YES	YES
8		Transposed in regional legislation.		
9	BE - B	YES	YES	YES
10		Transposed in regional legislation.		
11	BG	YES	YES	YES
12			Targets have been put in place with gradual augmentations each year frolm 2005 to 2015.	

6.1 Main provisions implementation at the national level

6.1.1 Waste prevention

Waste prevention, due to its situation at the top of the EU waste hierarchy and its importance as an element of extended producer responsibility within the context of the ELV Directive, was selected as a key area for analysis. The implementation of this concept within the context of the ELV Directive was examined in relation to Article 4.1 of the Directive, the text for which is provided in the box below.

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, re-use 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.

The table below provides an assessment of the implementation across MS of the key measures related to Article 4.1, along with commentary.

Table 3: Waste prevention – provision implementation assessment

Member State	***Article 4.1*** *Waste prevention: encouragement of prevention in terms of limiting hazardous substances, designing vehicles to facilitate re-use, and integrating an increasing quantity of recycled materials*			
	Have measures been put in place to limit the use of hazardous substances?	***Have measures been put in place to faciliate the dismantling, re-use, recovery and recycling of end-of-life vehicles?***	***Have measures been put in place to integrate an increasing quantity of recycled material in vehicles or other products?***	***Overall implementation***
AT	UNCLEAR	UNCLEAR	UNCLEAR	UNCLEAR
	The Austrian legislation does not clearly transpose the 3 paragraphs of Article 4(1). Collection and recovery systems may be authorized on the conditions that they invest in waste prevention projects.			Not clearly transposed.
BE - W	YES	YES	YES	YES
	This measure is included in both federal and regional legislation.			
BE - F	YES	YES	YES	YES
	This measure is included in both federal and regional legislation.			
BE - B	YES	YES	YES	YES
	This measure is included in both federal and regional legislation.			
BG	UNCLEAR	UNCLEAR	UNCLEAR	UNCLEAR
	The measure seems to have been transposed. Yet the responsability of producers is not clearly stated.			Response is not clear.
CY	YES	YES	YES	YES
	The article in the Cyprus legislation is directly aligned with the text of the directive since the introduction of a new amendment in 2011 titled "Type approval (Re-use, Recycling, Recovery of Motor Vehicles)," modifying the Decree of 2006.			Prevention measures have truly been transposed in 2011.
CZ	PARTLY	PARTLY	NO	PARTLY
	The Czech Republic doesn't have a special law for the management of ELVs. The law on waste requires that product manufacturers produce their products in order to limit the emergence of non-recoverable waste from these products, particularly hazardous waste.			Not specifically transposed for ELVs but for waste in general.

Member State	***Article 4.1*** ***Waste prevention: encouragement of prevention in terms of limiting hazardous substances, designing vehicles to facilitate re-use, and integrating an increasing quantity of recycled materials***			
	Have measures been put in place to limit the use of hazardous substances?	***Have measures been put in place to faciliate the dismantling, re-use, recovery and recycling of end-of-life vehicles?***	***Have measures been put in place to integrate an increasing quantity of recycled material in vehicles or other products?***	***Overall implementation***
DE	YES	YES	YES	YES
	The article in the 2002 German legislation on ELV is directly aligned with the EU directive.			
DK	PARTLY	PARTLY	PARTLY	PARTLY
	The environmental protection act states that a person who imports or manufactures goods should ensure that the product does not cause pollution or waste of materials and energy resources (and implements specified waste prevention measures). Yet there is no specific clause or legislation on ELV and waste prevention in relation to the three points in Article 4.1 of the EU directive.			Prevention of waste in general is mentioned (not for ELV in particular)
EE	YES	YES	YES	YES
	These measures are included in a "Waste Act" and thus required for all types of products.			Prevention of waste in general is mentioned (not for ELV in particular)
ES	YES	YES	YES	YES
FI	YES	YES	YES	YES
	The responsibility of producers is strongly emphasized in articles titled "Producer responsibility".			
FR	YES	UNCLEAR	UNCLEAR	UNCLEAR
	Through the transposition of article 4(2) of the EU directive.	No information was provided in relation to these clauses.		
GR	NO	NO	NO	NO
	Greece has no vehicle manufacturers. The authorities check the "Certificates of Conformity" of vehicles imported.			

Member State	***Article 4.1*** *Waste prevention: encouragement of prevention in terms of limiting hazardous substances, designing vehicles to facilitate re-use, and integrating an increasing quantity of recycled materials*			
	Have measures been put in place to limit the use of hazardous substances?	*Have measures been put in place to faciliate the dismantling, re-use, recovery and recycling of end-of-life vehicles?*	*Have measures been put in place to integrate an increasing quantity of recycled material in vehicles or other products?*	*Overall implementation*
HU	YES	YES	YES	YES
IE	YES	YES	YES	YES
			The RX3 programme encourages the use of recycled material in the manufacturing of new products, including ELVs.	
IT	YES	YES	YES	YES
LT	UNCLEAR	YES	YES	PARTLY
	Introduction of Green Public Procurement criteria for vehicles in 2008.			
LUX	YES	YES	YES	YES
LV	YES	YES	YES	YES
MT	YES	YES	YES	YES
NL	YES	YES	YES	YES
PL	YES	YES	YES	YES

Member State	***Article 4.1*** *Waste prevention: encouragement of prevention in terms of limiting hazardous substances, designing vehicles to facilitate re-use, and integrating an increasing quantity of recycled materials*			
	Have measures been put in place to limit the use of hazardous substances?	***Have measures been put in place to faciliate the dismantling, re-use, recovery and recycling of end-of-life vehicles?***	***Have measures been put in place to integrate an increasing quantity of recycled material in vehicles or other products?***	***Overall implementation***
PT	YES	YES	YES	YES
	It is foreseen in the national legislation that the eco-contribution by vehicles manufacturers should reflect vehicle characteristics, usage of dangerous substances, incorporation of recycled materials and capacity for dismantling, re-use and recovery.			
RO	YES	YES	YES	YES
SE	UNCLEAR	YES	UNCLEAR	UNCLEAR
SI	YES	YES	YES	YES
SK	UNCLEAR	YES	UNCLEAR	UNCLEAR
UK	YES	YES	YES	YES

- **Overall implementation**

Article 4.1 on waste prevention has been clearly transposed in 18 MS. For 3 MS (CZ, DK, LT) the provision has been partly transposed, while for another 5 MS it is unclear if the provision has been transposed. Of the 5 MS where transposition is unclear for 2 of these MS (AT, BG) it is not possible to determine implementation in relation to any of the three prevention criteria provided for in Article 4.1.; for the other 3 (FR, SE, SK) transposition can be determined for some criteria but not for others. The provision has not been implemented in 1 MS (GR) as Greece has no vehicle manufacturers. Therefore, authorities check the "Certificates of Conformity" of vehicles imported.

- **Trends in implementation**

In the case of some MS, such as the Czech Republic, Denmark and Estonia, the provisions in Article 4.1 have been transposed via general legislation on waste prevention rather than through a legislative document specific to ELVs. For other MS, for example Germany, the provisions have been transposed using nearly the exact text from the EU directive. Belgium transposed the legislation at a federal level as well as at a regional level in Flanders, Wallonie and the Brussels-Capital region. Cyprus truly put in place the prevention measures provided for in Article 4.1 in 2011 with an amendment to the existing legislation.

Some MS cited initiatives above and beyond the transposition of Article 4.1 which encourage waste prevention in relation to ELVs. In Portugal for example, the eco-contribution made by vehicle manufacturers is calculated to reflect vehicle characteristics including the usage of dangerous substances, the incorporation of recycled materials and the capacity for dismantling, re-use and recovery. In Lithuania, in 2008, Green Public Procurement criteria for vehicles were introduced. Ireland's RX3 programme encourages the use of recycled material in the manufacturing of new products, including ELVs.

- **Implementation challenges and areas of uncertainty**

No specific implementation challenges have been identified. Article 4.1 has been transposed in the majority of MS. For those MS where implementation was completely unclear (AT, BG) information provided by MS via questionnaires was insufficient to determine implementation. In other MS were implementation was partly unclear often general measures on waste prevention were cited, but without reference to all of the specific prevention areas highlighted in Article 4.1. Additional information from MS could help clarify these points.

6.1.2 Collection

Collection, the starting point for proper waste management and a key element of extended producer responsibility in the ELV Directive was selected as an area for analysis. The implementation of this concept within the context of the ELV Directive was examined in relation to Articles 5.1 and 5.4 of the Directive, the text of which are provided in the boxes below.

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.

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.

The Commission shall regularly monitor the implementation of the first subparagraph to ensure that it does not result in market distortions, and if necessary shall propose to the European Parliament and the Council an amendment thereto.

The table below provides an assessment of the implementation across MS of the key measures related to Articles 5.1 and 5.4, along with commentary.

Table 4: Collection – provision implementation assessment

Member State	***Article 5.1 & 5.4*** ***Collection : producer responsibility for the organisation of a takeback system and covering the costs of collection***				
	Have measures been taken to ensure that systems of collection have been set up?	***Have measures been taken to ensure that producers are responsible for a significant part of the cost of takeback schemes?***	***Have measures been taken to ensure the adequate availability of collection facilities?***	***Have measures been taken to ensure that collection and delivery to an authorised treatment facility is free of charge for vehicles owners?***	***Overall implementation***
AT	YES	YES	YES	YES	YES
BE - W	YES	YES	YES	YES	YES
	Implemented through availability obligations.		Sufficient coverage is attained if the network of official dealers is used or if 90% of final keepers/owners can dispose of their end-of-life vehicle within a 40-kilometre radius of their home.		These provisions are implemented through regional agreements
BE - F	YES	YES	YES	YES	YES
	Implemented through availability obligations.		A sufficient degree of coverage is achieved if the network of official distributors is designated or if 90% of the final keepers and/or owners can deliver their discarded vehicle to a collection point within a radius of 40 kilometres of their place of residence.	If the market price is positive, collection by an accredited centre will be effected at no cost to the collection points if the vehicle discarded is complete .	These provisions are implemented through regional agreements
BE - B	YES	YES	YES	YES	YES
	A collection point will preferably be an accredited centre or a point of sale for vehicles. If the collection point is not an accredited centre, the discarded vehicles returned are transferred to an accredited centre within six months.		A sufficient degree of coverage is achieved if the network of official distributors is used or if each producer or importer has designated at least one collection point in the territory of the Brussels Capital Region.		These provisions are implemented through regional agreements

Member State	*Article 5.1 & 5.4* *Collection : producer responsibility for the organisation of a takeback system and covering the costs of collection*				
	Have measures been taken to ensure that systems of collection have been set up?	*Have measures been taken to ensure that producers are responsible for a significant part of the cost of takeback schemes?*	*Have measures been taken to ensure the adequate availability of collection facilities?*	*Have measures been taken to ensure that collection and delivery to an authorised treatment facility is free of charge for vehicles owners?*	*Overall implementation*
BG	YES	PARTLY	UNCLEAR	YES	PARTLY
		Producers are required to provide collection points and the taking back of vehicles is free to the owner, yet the responsibility of producers to bear the costs is not clearly stated.	A collection system is the responsibility of producers but it is not stated that economic operators have to ensure adequate availability of these collection points.		
CY	UNCLEAR	YES	UNCLEAR	YES	UNCLEAR
	The measures seem to have been transposed; however the specific provisions included in the transposition were not provided making it difficult to ascertain.	Economic operators in general are made responsible for taking back vehicles.	The measures seem to have been transposed; however the specific provisions included in the transposition were not provided making it difficult to ascertain.		
CZ	YES	YES	YES	YES	YES
DE	YES	YES	YES	YES	YES
		Producers are clearly responsible for collection and bear the costs of taking back vehicles.			

Member State	*Article 5.1 & 5.4* *Collection : producer responsibility for the organisation of a takeback system and covering the costs of collection*				
	Have measures been taken to ensure that systems of collection have been set up?	*Have measures been taken to ensure that producers are responsible for a significant part of the cost of takeback schemes?*	*Have measures been taken to ensure the adequate availability of collection facilities?*	*Have measures been taken to ensure that collection and delivery to an authorised treatment facility is free of charge for vehicles owners?*	*Overall implementation*
DK	YES	YES	YES	UNCLEAR	PARTLY
		Manufacturers and importers can implement a "collective" scheme to collect vehicles.	The collective ELV scheme must ensure that established reception centers exist up to 25 km from the center of cities with more than 20,000 inhabitants, and that all owners and operators of a used vehicle can deliver it to a reception center within a distance of 50 km.		
EE	YES	YES	YES	YES	YES
		Producers must bear all costs of collection and treatment of ELV. Producers also have an obligation to collect and treat all ELV resulting from vehicles placed to the market before the 1st of January 2005 ("historical waste"). Costs of such waste shall be divided between these producers who are in market now in proportion to their market share.	The collecting and take back must be organised so that there is a collection site in every county (Estonia has 15 counties).		
ES	YES	YES	PARTLY	YES	PARTLY
			The National Plan for End-of-Life Vehicles (PNVFU) 2008-2015 stipulates the need to expand the network of reception centres and authorised treatment centres to include 1 100 centres with a view to covering the whole of Spain.		

Member State	*Article 5.1 & 5.4* *Collection : producer responsibility for the organisation of a takeback system and covering the costs of collection*				
	Have measures been taken to ensure that systems of collection have been set up?	*Have measures been taken to ensure that producers are responsible for a significant part of the cost of takeback schemes?*	*Have measures been taken to ensure the adequate availability of collection facilities?*	*Have measures been taken to ensure that collection and delivery to an authorised treatment facility is free of charge for vehicles owners?*	*Overall implementation*
FI	YES	YES	YES	YES	YES
		The producer obligations may cover products which the producer itself has put on the market as well as a proportion of all similar products put on the market that is considered reasonable in relation to the number or market share of the products, irrespective of the date on which the products were put on the market.			
FR	UNCLEAR	UNCLEAR	UNCLEAR	UNCLEAR	UNCLEAR
	No information was provided in relation to these clauses.				
GR	YES	YES	YES	YES	YES
	Producers of vehicles can participate in individual or in collective alternative management systems such as companies, (S.A. – L.T.D. e.t.c.) corporations, joint ventures etc.	The vehicle producers cover the cost of taking back vehicles or/and receive the ELVs so as to deliver them to authorised treatment facilities. The imported used cars that have been registered less than 6 months before their deregistration date are exempted from the obligation of the free of charge reception at their end of life.	This is ensured by the alternative management system put in place (Alternative Management of Vehicles Hellas) which contracts directly with ATFs; currently 97% of the Greek territory has access to ELV collection and treatment infrastructure.		
HU	YES	YES	YES	YES	YES

Member State	***Article 5.1 & 5.4*** *Collection : producer responsibility for the organisation of a takeback system and covering the costs of collection*				
	Have measures been taken to ensure that systems of collection have been set up?	***Have measures been taken to ensure that producers are responsible for a significant part of the cost of takeback schemes?***	***Have measures been taken to ensure the adequate availability of collection facilities?***	***Have measures been taken to ensure that collection and delivery to an authorised treatment facility is free of charge for vehicles owners?***	***Overall implementation***
IE	YES	YES	YES	YES	YES
			As a minimum and in accordance with the proximity principle, each producer's national collection system is required to have at least one authorised treatment facility in each local authority area that will provide free take-back for vehicles of that producer's brand. Producers are required to have additional authorised treatment facilities in place in those counties and cities with a larger population base (i.e. one additional facility for each additional 150,000 persons in the relevant county or city).		
IT	YES	YES	YES	YES	YES
	Vehicle manufacturers, either individually or communally, should organise a network of collection centres for end-of-life vehicles, suitably distributed throughout the country, or individual collection centres suitably distributed throughout the country, from which such vehicles are removed free of charge.				
LT	YES	YES	YES	YES	YES
LUX	YES	YES	YES	YES	YES
LV	YES	UNCLEAR	UNCLEAR	YES	UNCLEAR
			Unable to ascertain if measures have been taken.		
MT	YES	YES	YES	YES	YES
NL	YES	YES	YES	YES	YES

Member State	*Article 5.1 & 5.4* *Collection : producer responsibility for the organisation of a takeback system and covering the costs of collection*				
	Have measures been taken to ensure that systems of collection have been set up?	*Have measures been taken to ensure that producers are responsible for a significant part of the cost of takeback schemes?*	*Have measures been taken to ensure the adequate availability of collection facilities?*	*Have measures been taken to ensure that collection and delivery to an authorised treatment facility is free of charge for vehicles owners?*	*Overall implementation*
PL	YES	YES	YES	YES	YES
PT	YES	YES	YES	YES	YES
RO	YES	YES	YES	YES	YES
			A collection point will be provided in each county and in each city with a population in excess of 100 000 inhabitants; 3 collection points will be provided in the Bucharest municipal area.		
SE	YES	UNCLEAR	YES	YES	PARTLY
SI	YES	YES	YES	YES	YES
			At least one collection centre per administrative unit area covering vehicle registration markings LJ, KR, MB, GO, KP, NM, MS, KK, SG, PO and CE.		
SK	YES	YES	UNCLEAR	YES	PARTLY
	Fees have been put in place to be paid by producers for each vehicle sold; these funds are collected in the Recycling Fund which is dedicated to the collection, recovery and treatment of ELVs.			Vehicle owners are paid for drop off of used vehicles.	
UK	YES	YES	YES	YES	YES
			Consumers should not have to travel more than 30 miles to drop off their vehicle for treatment		

- **Overall implementation**

Articles 5.1 and 5.4 on the collection of ELVs has been clearly transposed in 19 MS. For 5 MS (BG, DK, ES, SE, SK) the provisions in these articles has been partly transposed. In another 3 MS (CY, FR, LV), based on the information provided by MS, it is unclear if the provisions have been put in place. In the case of France, no information was provided in relation to these clauses and it was not possible to determine if transposition had taken place of any clauses.

- **Trends in implementation**

In relation to the type of collection system to be put in place, MS typically transposed this clause in a way that allows flexibility for economic operators, with the possibility for individual or collective schemes. The adequate availability of collection facilities is defined differently by MS, with adequacy often defined in relation to the distance from an inhabitants dwelling or in relation to the number of counties or cities. For example in the Wallonie and Flanders regions of Belgium, it is considered that sufficient coverage is attained if the network of official dealers is used or if 90% of final keepers/owners can dispose of their end-of-life vehicle within a 40-kilometre radius of their home. In Estonia, collection and take back is required to be organised so that there is a collection site in every county (totalling to 15 across the country). In Romania, a collection point must be provided in each county and each city with a population over 100,000 inhabitants, with 3 collection points provided in the Bucharest municipal area.

In Greece an interesting clause has been put in place in relation to recently imported used cars. Such vehicles, if they have been registered less than 6 months before their deregistration date are exempt from free takeback. In the Slovak Republic, takeback is not only free, but vehicle owners are in fact paid to drop off their used vehicles.

- **Implementation challenges and areas of uncertainty**

For those MS where implementation was assessed as being partial, issues typically existed in relation to specific measures taken to ensure that producers were responsible for a significant part of the cost of the takeback scheme and to provide for an adequate availability of collection facilities. For MS in which uncertainty existed in relation to the transposition of the clauses in Articles 5.1 and 5.4, this was more related to ensuring that measures had been taken to ensure that collection systems had been set up and that adequate collection facilities area made available. Additional information from MS could help clarify some of these points.

6.1.3 Deregistration

Deregistration of end-of-life vehicles, a key measure for limiting the illegal import of vehicles and ensuring transfer to appropriate treatment operators, was selected as an area for analysis. The implementation of this concept within the context of the ELV Directive was examined in relation to Articles 5.3 and 5.5 of the Directive, the text of which are provided in the boxes below.

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.

Article 5.5

Member States shall take the necessary measures to ensure that competent authorities mutually recognise and accept the certificates of destruction issued in other Member States in accordance with paragraph 3. To this end, the Commission shall draw up, not later than 21 October 2001 the minimum requirements for the certificate of destruction

The table below provides an assessment of the implementation across MS of the key measures related to Articles 5.3 and 5.5, along with commentary.

Table 5: Deregistration – provision implementation assessment

Member State	*Article 5.3 & 5.5* *Deregistration: deregistration of vehicles and issuing of certificates of destruction*			
	Has a vehicle deregistration system been put in place?	***Has a system for the issuing of certificates of destruction (as a condition for deregistration) been put in place?***	***Have measures been put in place to ensure that certificates of destruction from other MS are recognised and accepted?***	***Overall implementation***
AT	YES	YES	PARTLY	PARTLY
	The new ordinance of 2010 has requires producers and importers to ensure that all ELVs are sent for shredder treatment until the end of the next following calendar year.	The owner or operator shall be issued on delivery of the old vehicle to a recycling center or an authorized treatment facility a certificate of destruction. A copy of this certificate shall be retained by the issuing authority at least seven years.	Austria has laid down minimum requirements for recycling certificates. All recycling certificates containing those minimum requirements are accepted at final deregistration (CoDs issued by other member states are not specifically adressed)	
BE - W	YES	YES	YES	YES
	The federal legislation is being amended to include a national deregistration system. Yet regional legislation requires the use of CoDs as a condition for deregistration, and CoDs issued by other begian regions are accepted, such as the ones issued by other MS.			
BE - F	YES	YES	YES	YES
	The federal legislation is being amended to include a national deregistration system. Yet regional legislation requires the use of CoDs as a condition for deregistration, and CoDs issued by other regions are accepted, such as the ones issued by other MS.			
BE - B	YES	YES	YES	YES
	The federal legislation is being amended to include a national deregistration system. Yet regional legislation requires the use of CoDs as a condition for deregistration, and CoDs issued by other regions are accepted, such as the ones issued by other MS.			

Member State	*Article 5.3 & 5.5* *Deregistration: deregistration of vehicles and issuing of certificates of destruction*			
	Has a vehicle deregistration system been put in place?	***Has a system for the issuing of certificates of destruction (as a condition for deregistration) been put in place?***	***Have measures been put in place to ensure that certificates of destruction from other MS are recognised and accepted?***	***Overall implementation***
BG	YES	YES	UNCLEAR	PARTLY
	A deregistration system was established in 2005.	New amendment: the operator of the collection or temporary storage site issue CoD only on behaf of dismantling centers.	Minimum requirement are set for CoDs but the ones issued by other MS are not cleary mentioned.	
CY	YES	YES	YES	YES
	The authorised treatment facilities are required to issue a "Certificate of Destruction" for each ELV they receive, and deliver or post it to the competent authority and to the last person who was in possession of the vehicle. This certificate is used for the deregistration of the vehicle. "CoDs" issued by other member states are accepted. Cyprus had a deregistration system in place before the implementation of the directive.			
CZ	YES	YES	YES	YES
DE	YES	YES	UNCLEAR	PARTLY
		The procedure for vehicle deregistered has slightly changed in 2011 .		
DK	YES	YES	UNCLEAR	PARTLY

Member State	***Article 5.3 & 5.5*** *Deregistration: deregistration of vehicles and issuing of certificates of destruction*			
	Has a vehicle deregistration system been put in place?	***Has a system for the issuing of certificates of destruction (as a condition for deregistration) been put in place?***	***Have measures been put in place to ensure that certificates of destruction from other MS are recognised and accepted?***	***Overall implementation***
EE	YES	YES	UNCLEAR	PARTLY
	A certificate of destruction is submitted to the Traffic Register for deregistration of vehicle electronically (certificate has to be entered in the register directly to the web database).			
ES	YES	YES	YES	YES
		The Ministry of the Interior introduced a model Certificate of Vehicle Destruction which all the Autonomous Communities have adopted and which must be presented in order to deregister a vehicle at the end of its life with the Register of Vehicles at the Directorate-General for Traffic.	Certificates of destruction that have been validly issued by other Member States of the European Union will have the same effects as if they had been issued by authorised centres in Spain. For the purposes of the definitive deregistration of such vehicles, their owners or their representatives must complete the formalities specified in the Spanish General Vehicle Regulation at the corresponding Provincial Traffic Office.	
FI	YES	YES	YES	YES
FR	UNCLEAR	UNCLEAR	UNCLEAR	UNCLEAR
	No information was provided in relation to these clauses.			
GR	YES	YES	YES	YES
	The system is electronic.	The certificate of destruction is issued by the treatment facility that has been authorised under the condition that the system is active in the area in which the ELV is delivered and is provided to the interested owner or holder directly via the system or the collection point within 8 days from issuance of the certificate of receipt.		

Member State	*Article 5.3 & 5.5* *Deregistration: deregistration of vehicles and issuing of certificates of destruction*			
	Has a vehicle deregistration system been put in place?	*Has a system for the issuing of certificates of destruction (as a condition for deregistration) been put in place?*	*Have measures been put in place to ensure that certificates of destruction from other MS are recognised and accepted?*	*Overall implementation*
HU	YES	YES	YES	YES
IE	YES	YES	YES	YES
	A system is in place for the recording of "scrap markers" against vehicles which have been notified to the National Vehicle & Driver File as being scrapped. This system, which pre-dated the introduction of Directive 2000/53/EC on end-of-life vehicles, prevents the renewal of motor taxation on such vehicles; effectively prohibiting any further use of such vehicles on public roads.			
IT	YES	YES	YES	YES
	Italy already had a deregistration system in place before Directive 2000/53/EC came into force.	In accordance with the procedures laid down by Presidential Decree No 358 of 19 September 2000, within thirty days after the vehicle has been delivered for dismantling, the operator, dealer or manager must hand in the certificate of ownership, log book and licence plates of the end-of-life vehicle.		
LT	YES	YES	YES	YES
	Three copies of the Certificate of Destruction of an End-of-life Vehicle must be prepared, the first one of which shall be given to the owner of the end-of-life vehicle who shall submit it to Regitra, a state company that registers vehicles, issues documents and manages registration data in the Republic of Lithuania; the second one is kept by the company that issued the certificate; and the third one (within 10 days of the end of the last quarter) shall be submitted to the regional environment protection department. If an end-of-life vehicle is submitted for destruction abroad without first being disassembled as metal scrap or is sold in parts, a document attesting the delivery (sale) of the vehicle abroad may be presented instead of the certificate of destruction of an end-of-life vehicle.			

Member State	*Article 5.3 & 5.5* *Deregistration: deregistration of vehicles and issuing of certificates of destruction*			
	Has a vehicle deregistration system been put in place?	*Has a system for the issuing of certificates of destruction (as a condition for deregistration) been put in place?*	*Have measures been put in place to ensure that certificates of destruction from other MS are recognised and accepted?*	*Overall implementation*
LUX	YES	YES	YES	YES
LV	YES	YES	YES	YES
MT	YES	YES	YES	YES
NL	YES	YES	YES	YES
PL	YES	YES	YES	YES
PT	YES	YES	YES	YES
RO	YES	YES	YES	YES
SE	YES	YES	YES	YES
SI	YES	YES	NO This article is not implemented into Slovenian law; there not been any such cases and it is envisaged that if such situations were to arise they would be treated on a case-by-case basis.	PARTLY
SK	YES	YES	YES Original certificate issued by another MS must be accompanied by a translation.	YES
UK	YES	YES	YES	YES

- **Overall implementation**

Articles 5.3 and 5.5 on the deregistration of ELVs has been fully transposed in 20 MS. For 6 MS (AT, BG, DE, DK, EE, SI) transposition has been identified as partial, while for 1 MS (FR) based on the information provided, it is unclear if the relevant provisions have been put in place.

- **Trends in implementation**

Most MS have put in place a vehicle deregistration system and introduced the issuing of certificates of destruction as a condition for deregistration. A number of MS, such as Ireland and Italy, had deregistration systems in place which pre-dated the introduction of the ELV Directive. In the case of Belgium, currently the provisions related to Article 5.3 and 5.5 are implemented at the regional level and federal legislation is in the process of being amended to include a national deregistration system.

Procedures for deregistration and the delivery of certificates of destruction vary by MS. Some are electronic, such as in Estonia and Greece. A varying number of copies required for certificates of destruction and differing periods for record keeping of such paperwork can also be observed among MS.

Measures to ensure the acceptance of certificates of destruction from other MS also differ among MS, with some accepting certificates of destruction based on their alignment with certain criteria and others directly accepting those documents validated by another MS authority but requiring a translation or the completion of additional administrative procedures. For example in the Slovak Republic an original certificate of destruction issued by another MS must be accompanied by a translation. In Slovenia this clause has not been implemented as no such situation has arisen and it is considered that if such situations were to occur, they would be treated on a case-by-case basis.

- **Implementation challenges and areas of uncertainty**

For those MS where transposition was assessed as being partial, issues identified were primarily related to the implementation of measures to ensure the recognition of certificates of destruction from other MS. For this clause certain MS did not mention anything in relation to the acceptance of certificates of destruction from other MS whereas others specified clearly the elements to be included in a certification of destruction for it to be considered valid but did not indicate if this applied also to certificates prepared in other MS.

6.1.4 Treatment

The permitting and treatment conditions for ELVs, which seek to reduce the environmental impacts of such operations and maximise the potential for re-use of vehicle components, was selected as an area for analysis. The implementation of this concept within the context of the ELV Directive was examined in relation to Articles 6.2 and 6.3 of the Directive, the text of which are provided in the boxes below.

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.

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 re-use 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.

The table below provides an assessment of the implementation across MS of the key measures related to Articles 6.2 and 6.3, along with commentary.

Table 6: Treatment – provision implementation assessment

Member State	***Article 6.2 & 6.3*** ***Treatment: permitting for treatment operations and proper treatment conditions to be fulfilled***		
	Have measures been taken to ensure that establishments carrying out treatment operations have a permit or are registered with the competent authorities?	***Have measures been taken to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances?***	***Overall implementation***
AT	YES	YES	YES
		Minimum requirement for treatment facilities are specified in Annexes. Austria has declared that the requirements contain at least the obligations stated in Article 6(3) of the directive 2000/53/EC. The new ordinance of 2010 requires producers and importers to ensure all ELVs are transferred to a shredder treatment before the end of the next following calendar year.	
BE - W	YES	YES	YES
	Implemented in regional legislation.		
BE - F	YES	YES	YES
	From 2005, treatment facilities must have an environmental permit (regional legislation).		
BE - B	YES	YES	YES
	Implemented in regional legislation.		
BG	YES	YES	YES

Member State	***Article 6.2 & 6.3*** *Treatment: permitting for treatment operations and proper treatment conditions to be fulfilled*		
	Have measures been taken to ensure that establishments carrying out treatment operations have a permit or are registered with the competent authorities?	***Have measures been taken to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances?***	***Overall implementation***
CY	YES	YES	YES
	End-of-life vehicles shall be stripped before further treatment.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. 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 shall be carried out as soon as possible.		
CZ	YES	YES	YES
DE	YES	YES	YES
	Authorisation for operators of acceptance, collection, dismantling, shredder and other-ELV related facilities is conditional on facilities complying with requirements specified in the German legislation and being certified by an expert. The certification is valid for a period of no more than 18 months.		
DK	YES	YES	YES
	Registration must include evidence that either the company is certified, or that the company has established a quality or environmental management system and has contracted for certification with an accredited certification company. The company can then be authorised within 3 weeks.	The vehicles must be depolluted within one month.	

Member State	*Article 6.2 & 6.3* *Treatment: permitting for treatment operations and proper treatment conditions to be fulfilled*		
	Have measures been taken to ensure that establishments carrying out treatment operations have a permit or are registered with the competent authorities?	***Have measures been taken to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances?***	***Overall implementation***
EE	YES	YES	YES
ES	YES	UNCLEAR	UNCLEAR
	Since the power to authorise these centres lies with the Autonomous Communities, the criteria have been harmonised to avoid market distortions due to geographical variations and to facilitate the establishment of centres throughout the national territory.	The only information avaliable is that treatment operations at the corresponding authorised treatment centre must be completed within 30 days.	
FI	YES	YES	YES
FR	YES	YES	YES
GR	YES	YES	YES
		The article is directly aligned on the EU directive.	
HU	YES	YES	YES
IE	YES	YES	YES
		Each authorised treatment facility is obligated to ensure that the depollution of an end-of-life vehicle occurs within 10 days of its deposit at the facility.	

Member State	*Article 6.2 & 6.3* *Treatment: permitting for treatment operations and proper treatment conditions to be fulfilled*		
	Have measures been taken to ensure that establishments carrying out treatment operations have a permit or are registered with the competent authorities?	*Have measures been taken to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances?*	*Overall implementation*
IT	YES	YES	YES
LT	YES	UNCLEAR	UNCLEAR
LUX	YES	YES	YES
LV	YES	YES	YES
MT	YES	YES	YES
NL	YES	YES	YES
PL	YES	UNCLEAR	UNCLEAR
PT	YES	UNCLEAR	UNCLEAR

Member State	***Article 6.2 & 6.3*** ***Treatment: permitting for treatment operations and proper treatment conditions to be fulfilled***		
	Have measures been taken to ensure that establishments carrying out treatment operations have a permit or are registered with the competent authorities?	***Have measures been taken to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances?***	***Overall implementation***
RO	YES	YES	YES
		Upon receipt of end-of-life vehicles, hazardous materials and components shall be selectively removed, no later than 3 months after the issuing of the certificate of destruction.	
SE	YES	PARTLY	PARTLY
		Provides for removal and treatment order to promote recycling, but not all conditions located in legislation provided.	
SI	YES	YES	YES
SK	UNCLEAR	YES	UNCLEAR
UK	YES	YES	YES

- **Overall implementation**

Articles 6.2 and 6.3 on the treatment of ELVs have been clearly transposed by 21 MS and partly transposed in 1 MS (SE). In the case of Sweden, a permitting system is in place and legislation provides for the use of a dismantling and treatment order to promote recycling; however, not all the provisions in 6.3 were located in the legislation provided. The transposition status of Articles 6.2 and 6.3 is unclear in 5 MS (ES, LT, PL, PT, SK). For those MS where the uncertainty of implementation was partial, this was typically related to measures having been taken to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances.

- **Trends in implementation**

Varying permitting procedures exist in MS; a number of MS have implemented permitting requirements primarily through broader pieces of legislation on waste management and treatment operations for all waste streams, whereas others have laid down specific legislation for ELV-related permitting. In Belgium Articles 6.2 and 6.3 are implemented at a regional level.

There also exist different time limitations for treatment of ELVs among MS. For example in Denmark vehicle depollution must take place within one month of collection; similarly, in Spain treatment operations at authorised treatment centres must be completed with 30 days. In Ireland the time limit for treatment is much shorter with authorised treatment facilities required to ensure that ELV depollution occurs within 10 days of its deposit at the treatment facility. On the other end of the spectrum, Romania specifies that hazardous materials and components from ELVs must be selectively removed no later than 3 months after the issuing of a certificate of destruction.

- **Implementation challenges and areas of uncertainty**

As indicated further above, a key point of uncertainty for a number of MS was the implementation of measures to ensure that establishments carrying out treatment fulfil criteria related to stripping and removal of hazardous substances. Some MS mentioned that the fulfilment of certain treatment criteria was required but failed to specify what such criteria were or if they were aligned with Annex I of the ELV Directive. Uncertainty in terms of the wording used in the transposed legislation and the provisioning of insufficient information in some cases made in notably difficult to fully assess the transposition of Article 6.3.

6.1.5 Re-use and recovery

The priority put on re-use and recovery, in line with the waste hierarchy, and re-use and recovery targets for ELVs were selected as an area for analysis. The implementation of this concept within the context of the ELV Directive was examined in relation to Articles 7.1 and 7.2 of the Directive, the text of which are provided in the boxes below.

Article 7.1

Member States shall take the necessary measures to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used 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.

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 re-use and recovery shall be increased to a minimum of 85 % 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 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 re-use and recovery and not lower than 70 % for re-use 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 re-use 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.

By 31 December 2005 at the latest the European Parliament and the Council shall re-examine the targets referred to in paragraph (b) on the basis of a report of the Commission, accompanied by a proposal. In its report the Commission shall take into account the development of the material composition of vehicles and any other relevant environmental aspects related to vehicles.

The Commission shall, in accordance with the procedure laid down in Article 11, establish the detailed rules necessary to control compliance of Member States with the targets set out in this paragraph. In doing so the Commission shall take into account all relevant factors, inter alia the availability of data and the issue of exports and imports of end-of life vehicles. The Commission shall take this measure not later than 21 October 2002.

The table below provides an assessment of the implementation across MS of the key measures related to Articles 7.1 and 7.2, along with commentary.

Table 7: Re-use and recovery – provision implementation assessment

Member State	***Article 7.1 & 7.2*** ***Re-use and recovery: encouragement of reuse and recovery and fulfilment of targets***		
	Have measures been taken to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used and the giving of preference to recycling when environmentally viable?	***Have measures been taken to ensure that re-use and recovery increases to a minimum of 85% by 1 January 2006 and to 95% by 1 January 2015 and that re-use and recycling increases to a minimum of 80% by 1 January 2006 and 85% by 1 January 2015 average weight per vehicle per year?***	***Overall implementation***
AT	PARTLY	YES	PARTLY
	The legislation simply states that producers and importers must recycle components if not suitable for re-use. The transposition of this measure is mainly done through the targets set in accordance with Article 7(2).		
BE - W	YES	YES	YES
BE - F	YES	YES	YES
	Transposed in regional legislation.		
BE - B	YES	YES	YES
	Transposed in regional legislation.		
BG	YES	YES	YES
		Targets have been put in place with gradual augmentations each year frolm 2005 to 2015.	

Member State	***Article 7.1 & 7.2*** ***Re-use and recovery: encouragement of reuse and recovery and fulfilment of targets***		
	Have measures been taken to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used and the giving of preference to recycling when environmentally viable?	***Have measures been taken to ensure that re-use and recovery increases to a minimum of 85% by 1 January 2006 and to 95% by 1 January 2015 and that re-use and recycling increases to a minimum of 80% by 1 January 2006 and 85% by 1 January 2015 average weight per vehicle per year?***	***Overall implementation***
CY	YES	YES	YES
	The amendment of 2011 has ensured the article in the Cyprus legislation is totally aligned on the Directive.		
CZ	PARTLY	YES	PARTLY
	The legislation encourages reuse. However recycling is not mentioned.		
DE	PARTLY	YES	PARTLY
	This measure is not transposed, aside from the requirements to meet re-use, recycling, recovery targets.		
DK	PARTLY	YES	PARTLY
	Re-use is regularly called for in the legislation. Yet it is not directly aligned with article 7(1).		
EE	PARTLY	YES	PARTLY
	The waste act includes a waste hierarchy. However this is not specific to ELV and thus not totally aligned with the Directive.		

Member State	***Article 7.1 & 7.2*** *Re-use and recovery: encouragement of reuse and recovery and fulfilment of targets*		
	Have measures been taken to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used and the giving of preference to recycling when environmentally viable?	***Have measures been taken to ensure that re-use and recovery increases to a minimum of 85% by 1 January 2006 and to 95% by 1 January 2015 and that re-use and recycling increases to a minimum of 80% by 1 January 2006 and 85% by 1 January 2015 average weight per vehicle per year?***	***Overall implementation***
ES	PARTLY	YES	PARTLY
	Re-use is regularly called for in the legislation. Yet it is not directly aligned with article 7(1).		
FI	YES	YES	YES
FR	PARTLY	YES	PARTLY
	This measure is not transposed, aside from the requirements to meet re-use, recycling, recovery targets.		
GR	YES	YES	YES
HU	YES	YES	YES
IE	YES	YES	YES

Member State	*Article 7.1 & 7.2* *Re-use and recovery: encouragement of reuse and recovery and fulfilment of targets*		
	Have measures been taken to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used and the giving of preference to recycling when environmentally viable?	*Have measures been taken to ensure that re-use and recovery increases to a minimum of 85% by 1 January 2006 and to 95% by 1 January 2015 and that re-use and recycling increases to a minimum of 80% by 1 January 2006 and 85% by 1 January 2015 average weight per vehicle per year?*	*Overall implementation*
IT	YES	YES	YES
LT	YES	YES	YES
LUX	YES	YES	YES
LV	YES	PARTLY	PARTLY
		In place for 2015 in legislation, unclear if in place for 2006	
MT	YES	YES	YES
NL	YES	YES	YES
PL	YES	YES	YES
PT	YES	YES	YES

Member State	***Article 7.1 & 7.2*** *Re-use and recovery: encouragement of reuse and recovery and fulfilment of targets*		
	Have measures been taken to encourage the re-use of components which are suitable for re-use, the recovery of components which cannot be re-used and the giving of preference to recycling when environmentally viable?	***Have measures been taken to ensure that re-use and recovery increases to a minimum of 85% by 1 January 2006 and to 95% by 1 January 2015 and that re-use and recycling increases to a minimum of 80% by 1 January 2006 and 85% by 1 January 2015 average weight per vehicle per year?***	***Overall implementation***
RO	YES	PARTLY	PARTLY
		Targets laid down but entry into force for cars produced after 1 January 1980 is 1 January 2007 (rather than 2006).	
SE	YES	PARTLY	PARTLY
		The legislation implementing these targets came into place in 2007; therefore the 2006 targets are stated but without a date (assumed to be valid from as soon as legislation put in place).	
SI	YES	YES	YES
SK	YES	YES	YES
UK	YES	YES	YES

- **Overall implementation**

Articles 7.1 and 7.2 on the re-use and recovery of ELVs have been fully transposed in 17 MS and partly transposed in 10 MS (AT, CZ, DE, DK, EE, ES, FR, LV, RO, SE). **Trends in implementation**

Most MS transposed the re-use, recycling and recovery targets in Article 7.2 directly into their legislation, with around half making use of the derogation allows for in Article 7.2(a) for vehicles produced before 1 January 1980. In Bulgaria, gradually increasing targets, aligned around the percentages stated in Article 7.2 were put in place from 2005 to 2015; percentages stated started at 75% for re-use and recovery and 70% for re-use and recycling in 2005.

- **Implementation challenges and areas of uncertainty**

For slightly over half of those MS where the provisions were deemed to be partly transposed, the partiality was related to Article 7.1. In Austria, Germany and France, Article 7.1 was not transposed by a specific text or provision, other than via requirements to meet re-use, recycling and recovery targets. In the case of Denmark, Estonia and Spain, reference was made to re-use or the waste hierarchy, but nothing specifically aligned with Article 7.1 was identifiable in the legislation and information provided.

For the other MS where provisions were considered to be partly transposed, issues identified were in relation to Article 7.2. In Latvia, targets were identified as being in place for 2015; however, it was unclear if they were put in place for 2006. For Romania, targets were laid down aligned with the re-use, recycling and recovery percentages as required in the Directive; however, the date for entry into force of the first set of targets for those cars produced after 1 January 1980 was 1 January 2007 (rather than 2006). In the case of Sweden, legislation implementing the ELV targets came into place in 2007; therefore the 2006 targets are stated but without a date and assumed to be valid from as soon as the legislation was put into place.

6.1.6 Coding standards/dismantling information

The requirement for vehicle producers to use coding standards and provide dismantling information, in order to favour re-use and recovery of ELVs, in line with extended producer responsibility obligations, was selected as an area for analysis. The implementation of this concept within the context of the ELV Directive was examined in relation to Articles 8.1, 8.3 and 8.4 of the Directive, the text of which are provided in the boxes below.

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 re-use and recovery.

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.

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 re-used.

The table below provides an assessment of the implementation across MS of the key measures related to Articles 8.1, 8.3 and 8.4, along with commentary.

Table 8: Coding standards/dismantling information – provision implementation assessment

Member State	***Article 8.1, 8.3 & 8.4*** *Coding standards/dismantling information: producer obligation to use component and material coding standards and provide dismantling information to facilitate reuse and treatment*			
	Have measures been taken to ensure that producers as well as material and equipment manufacturers use component and material coding standards?	*Have measures been taken to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after it is put on the market?*	*Have measures been taken to ensure that manufacturers of components make available dismantling, storage and testing information on reuseable components to authorised treatment facilities?*	*Overall implementation*
AT	YES	YES	YES	YES
BE - W	YES	YES	YES	YES
	Through federal legislation.	Through regional legislation.		
BE - F	YES	YES	YES	YES
	Through federal legislation.	Through regional legislation.		
BE - B	YES	YES	YES	YES
	Through federal legislation.	Through regional legislation.		
BG	UNCLEAR	PARTLY	YES	PARTLY
	There are no vehicle manufacturers in Bulgaria. Response as to imports is not clear.	Producers are required to provide dismantling information for new vehicles; however a time limit is not specified in Bulgaria's response.		

Member State	***Article 8.1, 8.3 & 8.4*** *Coding standards/dismantling information: producer obligation to use component and material coding standards and provide dismantling information to facilitate reuse and treatment*			
	Have measures been taken to ensure that producers as well as material and equipment manufacturers use component and material coding standards?	*Have measures been taken to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after it is put on the market?*	*Have measures been taken to ensure that manufacturers of components make available dismantling, storage and testing information on reuseable components to authorised treatment facilities?*	*Overall implementation*
CY	YES	YES	YES	YES
	Producers are required through the amendment of 2011 to use coding standards to facilitate the identification of components.			
CZ	UNCLEAR	YES	YES	PARTLY
	Response provided is not sufficiently detailed to assess if implemented.			
DE	YES	YES	YES	YES
		It is specified that this information will be furnished to treatment centres upon request.		
DK	UNCLEAR	YES	UNCLEAR	UNCLEAR
EE	YES	YES	YES	YES

Member State	***Article 8.1, 8.3 & 8.4*** *Coding standards/dismantling information: producer obligation to use component and material coding standards and provide dismantling information to facilitate reuse and treatment*			
	Have measures been taken to ensure that producers as well as material and equipment manufacturers use component and material coding standards?	*Have measures been taken to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after it is put on the market?*	*Have measures been taken to ensure that manufacturers of components make available dismantling, storage and testing information on reuseable components to authorised treatment facilities?*	*Overall implementation*
ES	YES	YES	YES	YES
FI	YES	YES	YES	YES
FR	YES	UNCLEAR	UNCLEAR	UNCLEAR
		No information was provided in relation to these clauses.		
GR	YES	YES	YES	YES
	All provisions have been implemented, even if Greece has no vehicle manufacturers.			
HU	YES	PARTLY	UNCLEAR	PARTLY
		Required to provide dismantling information, but not specifically indicated that this must be provided within six months after the vehicle is put on the market.		
IE	YES	YES	YES	YES
			Producers are required to make dismantling information available, without prejudice to commercial and industrial confidentially, to authorised treatment facilities upon receipt of a written request for such information.	

Member State	***Article 8.1, 8.3 & 8.4*** *Coding standards/dismantling information: producer obligation to use component and material coding standards and provide dismantling information to facilitate reuse and treatment*			
	Have measures been taken to ensure that producers as well as material and equipment manufacturers use component and material coding standards?	*Have measures been taken to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after it is put on the market?*	*Have measures been taken to ensure that manufacturers of components make available dismantling, storage and testing information on reuseable components to authorised treatment facilities?*	*Overall implementation*
IT	YES	YES	YES	YES
LT	YES	YES	YES	YES
LUX	YES	YES	YES	YES
		In practice producers supply information on vehicles placed on the market via the International Dismantling Information System (IDIS).		
LV	YES	YES	YES	YES
MT	YES	YES	YES	YES
NL	YES	YES	YES	YES
PL	YES	YES	YES	YES
			Manufacturers are require to provide such information within 30 days from the day when the request was issued.	

Member State	*Article 8.1, 8.3 & 8.4* *Coding standards/dismantling information: producer obligation to use component and material coding standards and provide dismantling information to facilitate reuse and treatment*			
	Have measures been taken to ensure that producers as well as material and equipment manufacturers use component and material coding standards?	*Have measures been taken to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after it is put on the market?*	*Have measures been taken to ensure that manufacturers of components make available dismantling, storage and testing information on reuseable components to authorised treatment facilities?*	*Overall implementation*
PT	YES	YES	YES	YES
RO	YES	YES	YES	YES
SE	YES	YES	YES	YES
SI	YES	YES	YES	YES
SK	YES	YES	YES	YES
UK	YES	YES	YES	YES

- **Overall implementation**

Articles 8.1, 8.3 and 8.4 on coding standards and dismantling information for ELV were determined to be fully transposed in 22 MS. In Belgium, Article 8.1 was transposed via federal legislation while Articles 8.3 and 8.4 were transposed through regional legislation in each of the three regions. The provisions were partly transposed in 3 MS (BG, CZ, HU) and it was unclear if transposition was completed in 2 MS (DK, FR).

- **Trends in implementation**

Some MS, such as Greece, stated putting in place the provisions related to coding standards and dismantling, but noted that they had no vehicle manufacturers operating on their territory. In practice, Article 8.3, requiring producers to provide dismantling information for each type of new vehicle put in the market within six months after its entry onto the market, has been put in place by most MS via the International Dismantling Information System (IDIS). The IDIS is available online (http://www.idis2.com/) and on a DVD and is free of charge for commercial enterprises working with ELVs.

- **Implementation challenges and areas of uncertainty**

For those MS in which the provisions were deemed to be partly implemented, issues were related to Articles 8.1 and 8.3. In the case of Bulgaria, it was uncertain if Article 8.1 had been transposed, while Article 8.3 was considered to be partly transposed. For the Czech Republic, insufficiently detailed information was provided in relation to Article 8.1 to assess transposition, while for Hungary Article 8.3 was considered to be partly implemented as no time frame was specified for the provisioning of dismantling information.

For those MS for which implementation was unclear, information provided by MS via questionnaires was insufficient to determine transposition. In the case of France, uncertainty was related to Articles 8.3 and 8.4 and in Denmark, uncertainly was linked to Articles 8.3 and 8.4.

6.2 Summary of implementation of the Directive in the EU-27

The six main provisions assessed were considered for the development of an overall analysis of the implementation of the ELV Directive across the EU-27. This aggregation process and a final implementation status for each MS can be found in the following section. Furthermore, a comparative analysis was undertaken in order to evaluate the evolutions in the implementation of the ELV Directive since the 2008 review period; this information is located further below in the section.

6.2.1 Overview of level of implementation of the ELV Directive

As indicated at the beginning of the chapter, the implementation status determined for each of the provisions was aggregated into an overview table (visible below) with the level of implementation per provision and an overall implementation status.

Table 9: Overall provision implementation assessment

Member State	*Prevention: Article 4.1*	*Collection: Articles 5.1 & 5.4*	*Deregistration: Articles 5.3 & 5.5*	*Treatment: Articles 6.2 & 6.3*	*Re-use and recovery: Articles 7.1 & 7.2*	*Coding standards/dismantling information: Articles 8.1, 8.3 & 8.4*	*Overall*
AT	UNCLEAR	YES	PARTLY	YES	PARTLY	YES	PARTLY
BE - W	YES	YES	YES	YES	YES	YES	YES
BE - F	YES	YES	YES	YES	YES	YES	YES
BE - B	YES	YES	YES	YES	YES	YES	YES
BG	UNCLEAR	PARTLY	PARTLY	YES	YES	PARTLY	PARTLY
CY	YES	UNCLEAR	YES	YES	YES	YES	PARTLY
CZ	PARTLY	YES	YES	YES	PARTLY	PARTLY	PARTLY
DE	YES	YES	PARTLY	YES	PARTLY	YES	PARTLY
DK	PARTLY	PARTLY	PARTLY	YES	PARTLY	UNCLEAR	PARTLY
EE	YES	YES	PARTLY	YES	PARTLY	YES	PARTLY
ES	YES	PARTLY	YES	UNCLEAR	PARTLY	YES	PARTLY
FI	YES	YES	YES	YES	YES	YES	YES
FR	UNCLEAR	UNCLEAR	UNCLEAR	YES	PARTLY	UNCLEAR	UNCLEAR
GR	NO	YES	YES	YES	YES	YES	PARTLY
HU	YES	YES	YES	YES	YES	PARTLY	PARTLY
IE	YES	YES	YES	YES	YES	YES	YES
IT	YES	YES	YES	YES	YES	YES	YES
LT	PARTLY	YES	YES	UNCLEAR	YES	YES	PARTLY
LUX	YES	YES	YES	YES	YES	YES	YES
LV	YES	UNCLEAR	YES	YES	PARTLY	YES	PARTLY
MT	YES	YES	YES	YES	YES	YES	YES
NL	YES	YES	YES	YES	YES	YES	YES
PL	YES	YES	YES	UNCLEAR	YES	YES	PARTLY
PT	YES	YES	YES	UNCLEAR	PARTLY	YES	PARTLY
RO	YES	YES	YES	YES	PARTLY	YES	PARTLY
SE	UNCLEAR	PARTLY	YES	PARTLY	YES	YES	PARTLY
SI	YES	YES	PARTLY	YES	YES	YES	PARTLY
SK	UNCLEAR	PARTLY	YES	UNCLEAR	YES	YES	PARTLY
UK	YES	YES	YES	YES	YES	YES	YES

The ELV Directive was assessed as being fully implemented in relation to the key provisions examined in eight MS, notably Belgium, Finland, Ireland, Italy, Luxembourg, Malta, the Netherlands and the United Kingdom.

The Directive was considered to be partly implemented in 18 MS, including Austria, Bulgaria, Cyprus, the Czech Republic, Germany, Denmark, Estonia, Spain, Greece, Hungary, Lithuania, Latvia, Poland, Portugal, Romania, Sweden, Slovenia, and the Slovak Republic. In the case of one MS, France, implementation was deemed unclear based on the information and documents provided.

For a number of MS where implementation was considered partial, this was due to uncertainty of the application of certain provisions based on the information provided; only portions of the implementation were therefore able to be verified. Partial implementation issues were primarily related to vehicle deregistration (5.3 & 5.5) and re-use and recovery (Articles 7.1 & 7.2). Uncertainty in relation to implementation was most commonly identified in relation to provisions on waste prevention (Article 4.1) and treatment (Articles 6.2 & 6.3).

It should be noted that the current exercise was based primarily on the questionnaires provided by MS as well as any additional information or documentations shared by MS. Follow up was also undertaken with MS initially assessed as having an overall "Unclear" status of implementation in order to provide clarification.

Some of the results above may be surprising in light of other information known about MS and their ELV policies; for example, Sweden is known as a positive example of the implementation of ELV management practices. However, information provided via questionnaires on implementation and other documentation were not sufficiently complete or clear to allow for an assessment of implementation as being fully completed in Sweden.

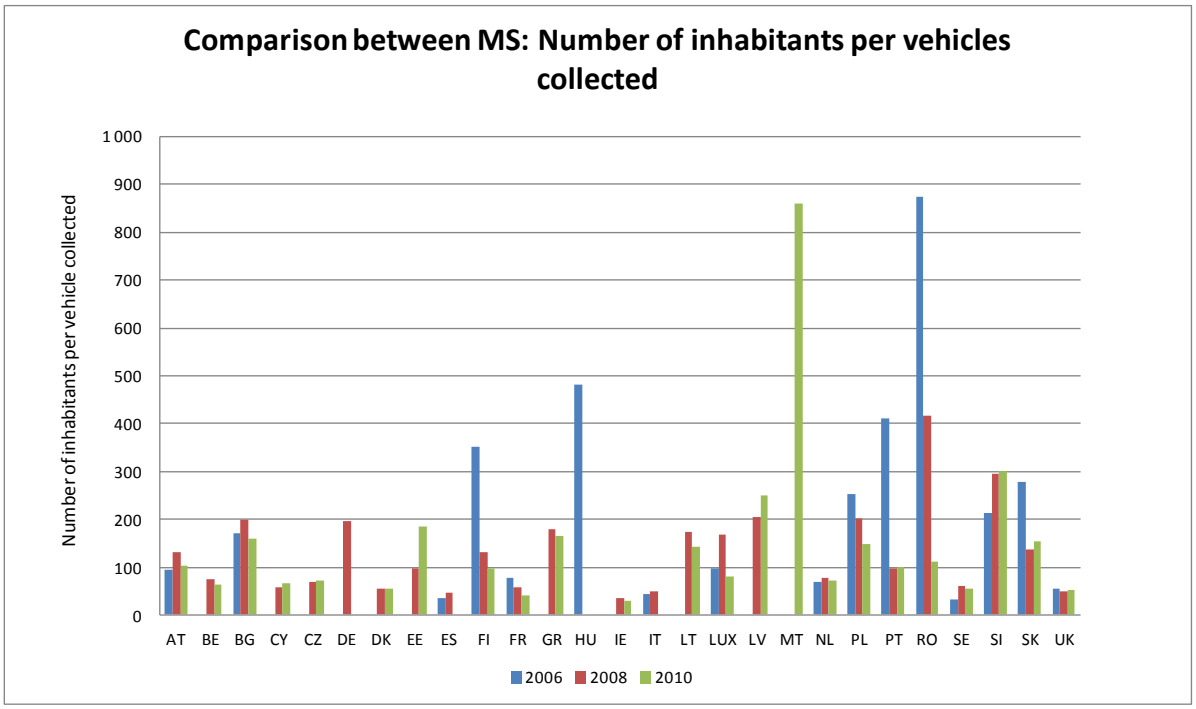
However, in comparison to the previous implementation period, even if implementation is considered partial for a number of MS by the current analysis based on responses provided, less legal actions appear to be in course. Furthermore it should be noted that metal pricing has remained high, making ELVs, as a key source of secondary raw metals a valuable resource. The recovery and sale of such materials can help cover the costs involved in dismantling and treatment.

Below, implementation statistics illustrate the evolution in key figures related to target achievement, quantities of vehicles treated and the number of treatment centres. Further below, information has been provided in relation to key areas of interest outside of the main provisions examined, notably illegal trafficking of ELVs, use of recycled materials and market structure evolutions in MS.

6.2.2 Evolutions in implementation since the 2008 review

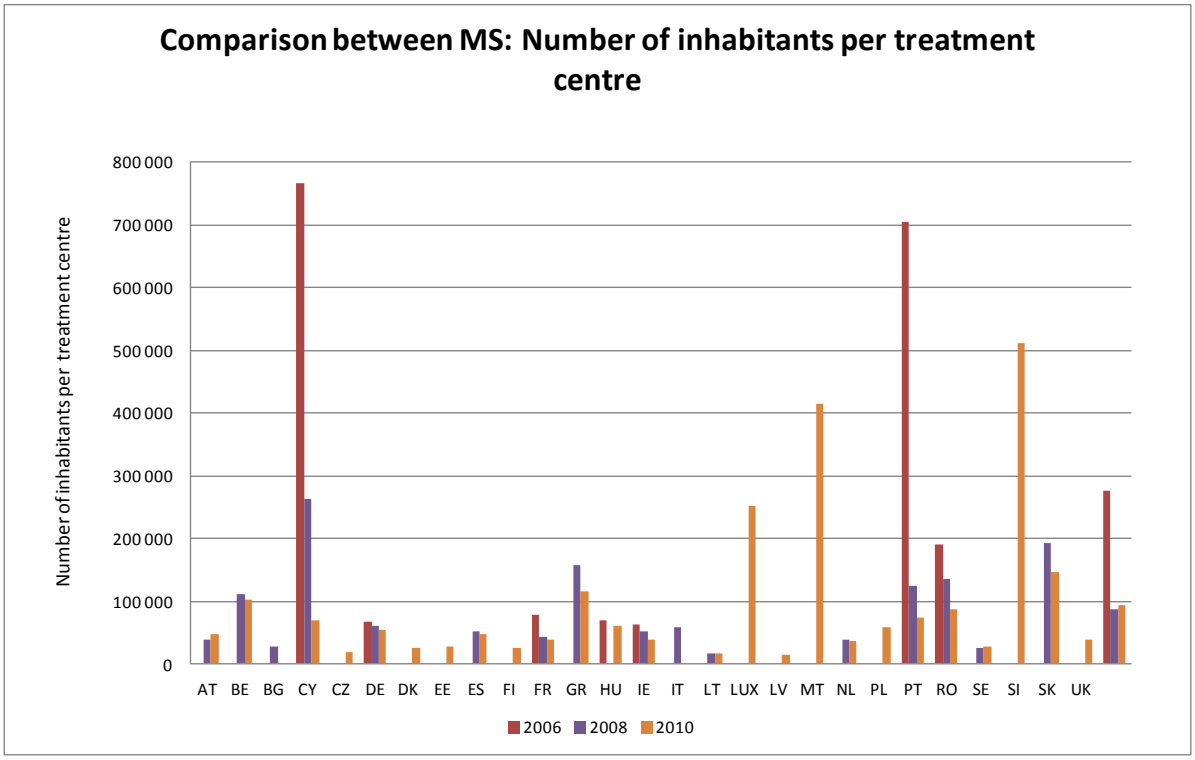
While an analysis on the evolution of the implementation of each main provision examined was difficult due to the information available from MS on previous and current implementation, some key statistics can help to provide a vision of the level of implementation of the Directive and MS progress over time. Below some key implementation statistics are provided which illustrate changes since the previous reporting period.

Figure 6: Number of inhabitants per vehicles collected and transferred to authorised treatment facilities



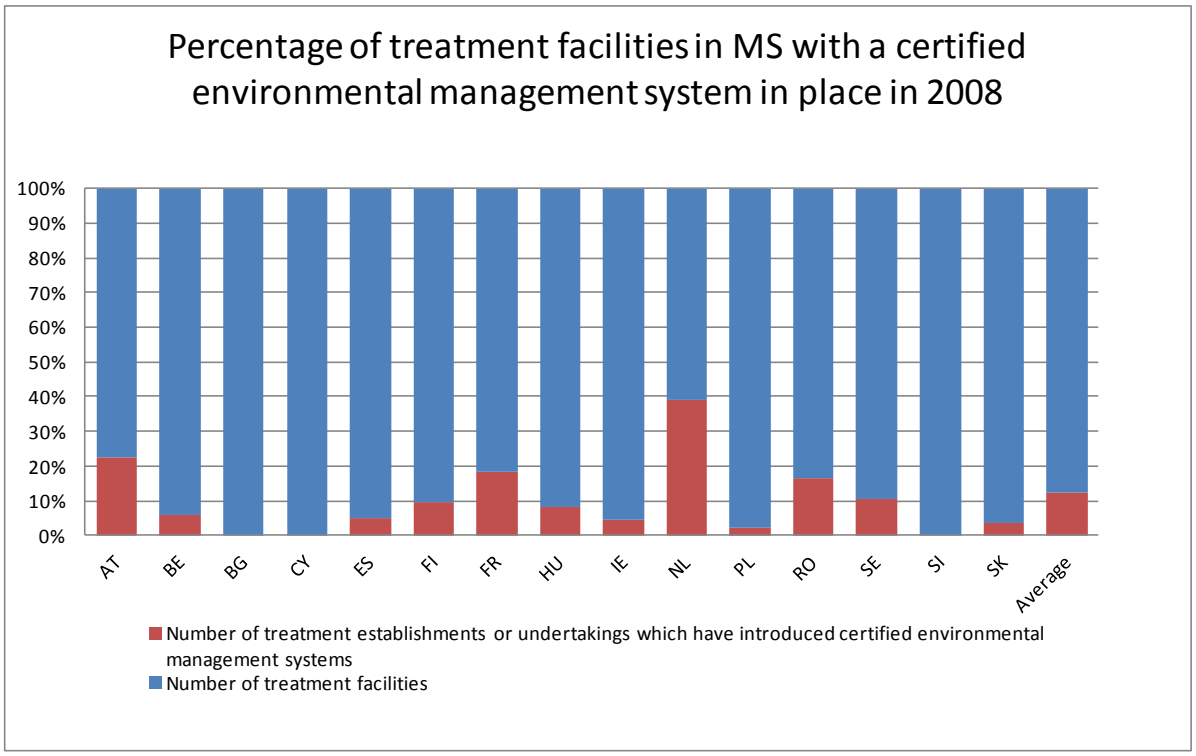
To compare the evolution of the number of vehicles collected between MS, the number of vehicles collected as been represented in relation to number of inhabitants, in order to compensate for the large differences between MS. For example, in Austria there are around 100 inhabitants for 1 vehicle collected, compared to Slovenia were the ratio is closer to 300 inhabitants for 1 vehicle collected. These numbers should be interpreted with caution as they could either display the high efficiency of vehicle collection in Austria, or the fact that Slovenia has less vehicles on the market. Yet, it can be seen that the ratio tends to decrease between 2008 and 2010. Similarly, the figure below shows that the ratio of inhabitants per treatment centre also has decreased between 2008 and 2010, thus favouring the theory that the availability of treatment centres has increased and by consequence, number of vehicles collected.

Figure 7: Number of inhabitants served by each treatment facility authorised or registered (in accordance with Article 6)



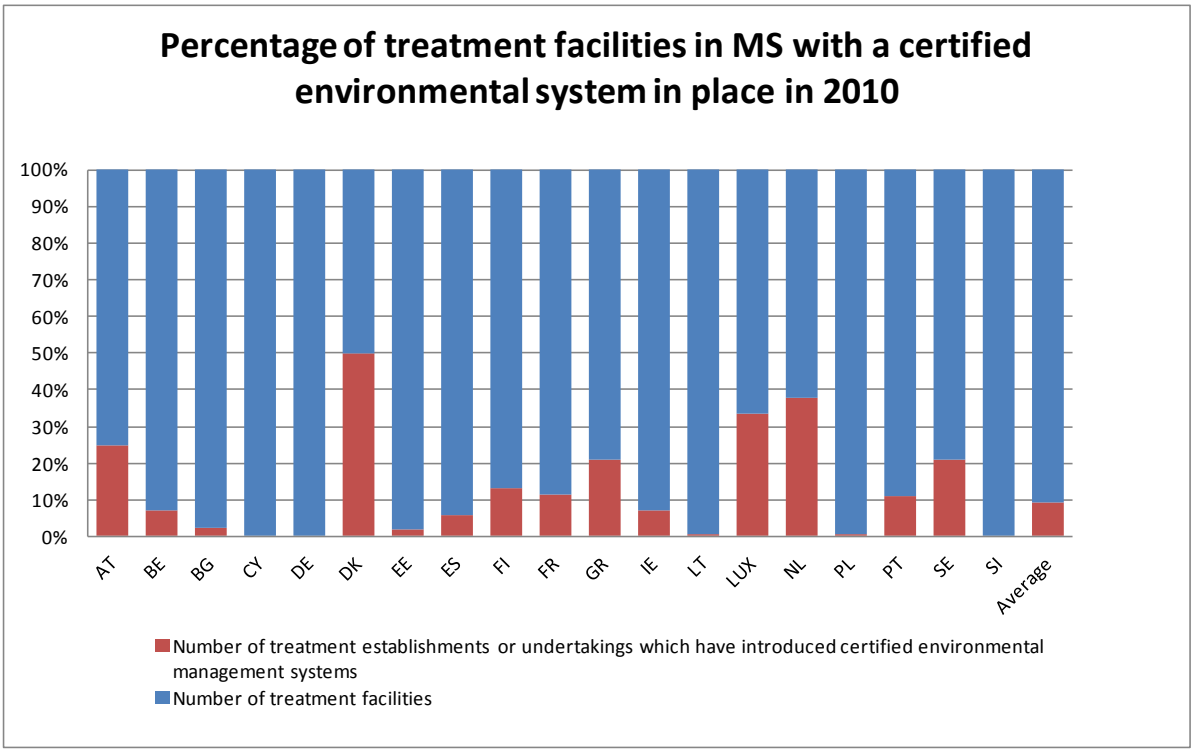
The below figures show that the number of treatment facilities which have implemented a certified environmental management system in comparison to the total number of authorised treatment facilities for the two reporting periods. Only the MS that have provided figures for both reporting periods are compared. However, these figures should once again be interpreted with caution as not all MS define certified environmental systems in the same way or do not ask facilities to report on them. Thus, the countries that have no such facilities would be compared to countries where no reporting is requested, like Germany for example.

Figure 8: Percentage of treatment establishments or undertakings which have introduced certified environmental management systems[8] in 2008 against the total number of treatment facilities



[8] It should be noted that the terms "authorised treatment facilities" and "treatment establishments or undertakings" make reference to the same organisations. However, the first term originates from the ELV Directive whereas the second term dates from the Directive 75/442/EEC and is then also used in Directive 2008/98/EC.

Figure 9: Percentage of treatment establishments or undertakings which have introduced certified environmental management systems[9] in 2010 against the total number of treatment facilities



Finally, MS have been requested to report on their achievement of the objectives set in the Directive 2000/53/EC as to the rates of re-use, recovery and recycling. The following figures illustrate the levels achieved by MS, compared against the targets set in Article 7.2:

(a) No later than 1 January 2006, for all end-of-life vehicles, the re-use and recovery shall be increased to a minimum of 85% 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 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 70% for re-use and recovery and not lower than 70% for re-use and recycling. Member States making use of this subparagraph shall inform the Comission and the other Member States of the reasons therefor;

(b) No later than 1 January 2015, for all end-of-life vehicles, the re-use 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.

[9] It should be noted that the terms "authorised treatment facilities" and "treatment establishments or undertakings" make reference to the same organisations. However, the first term originates from the ELV Directive whereas the second term dates from the Directive 75/442/EEC and is then also used in Directive 2008/98/EC.

Figure 10: Re-use, recovery and recycling rates achieved by Member states in 2006

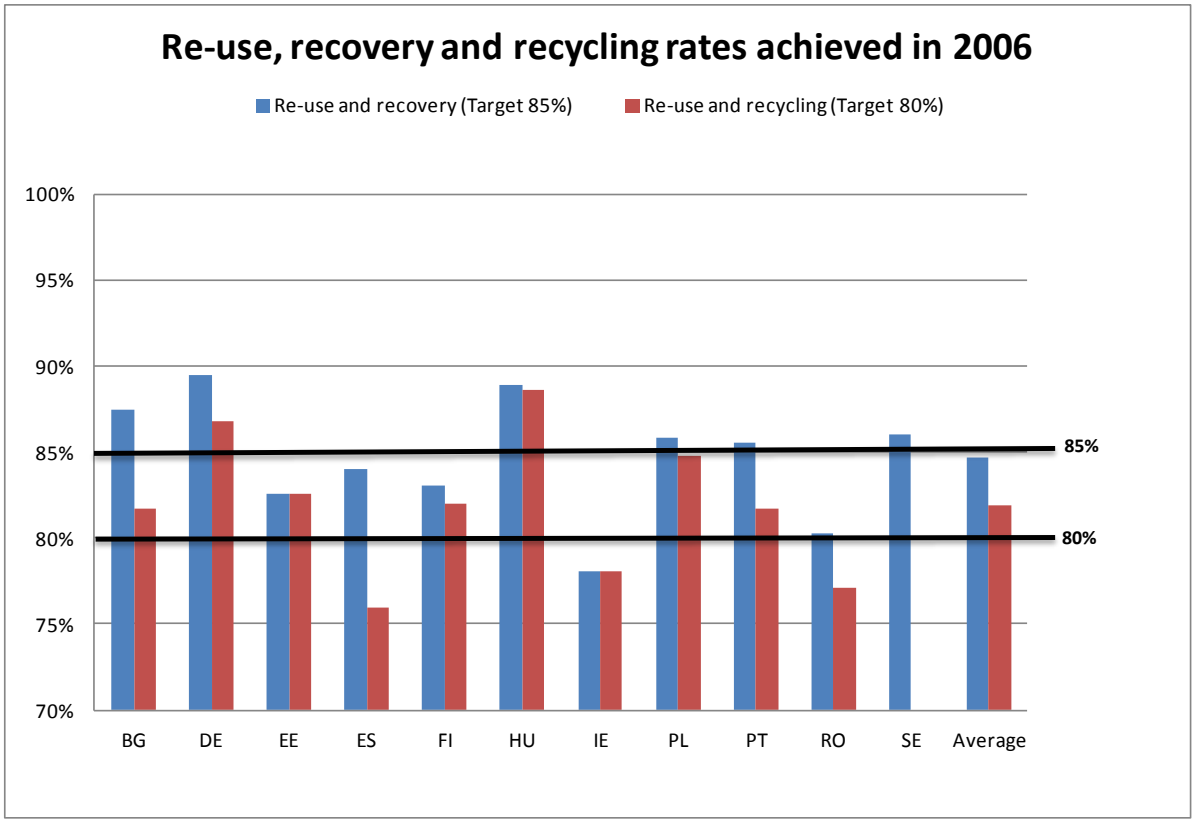


Figure 11: Re-use, recovery and recycling rates achieved by Member states in 2008

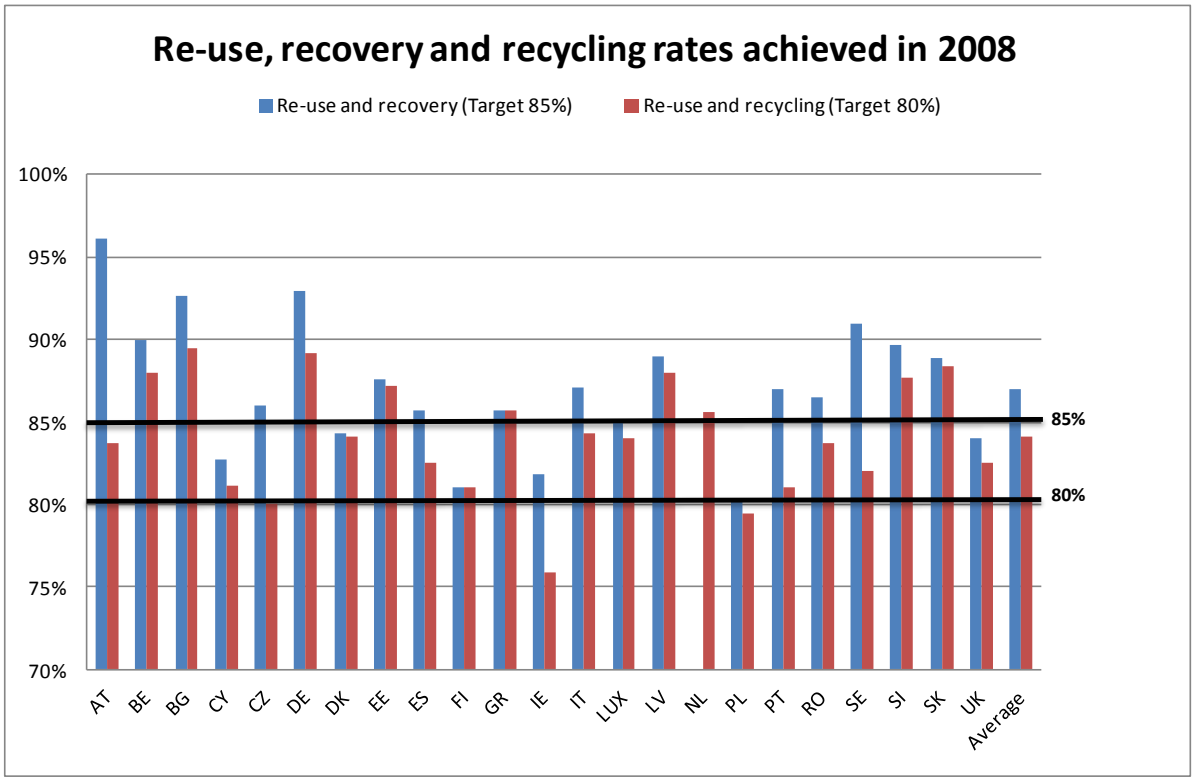
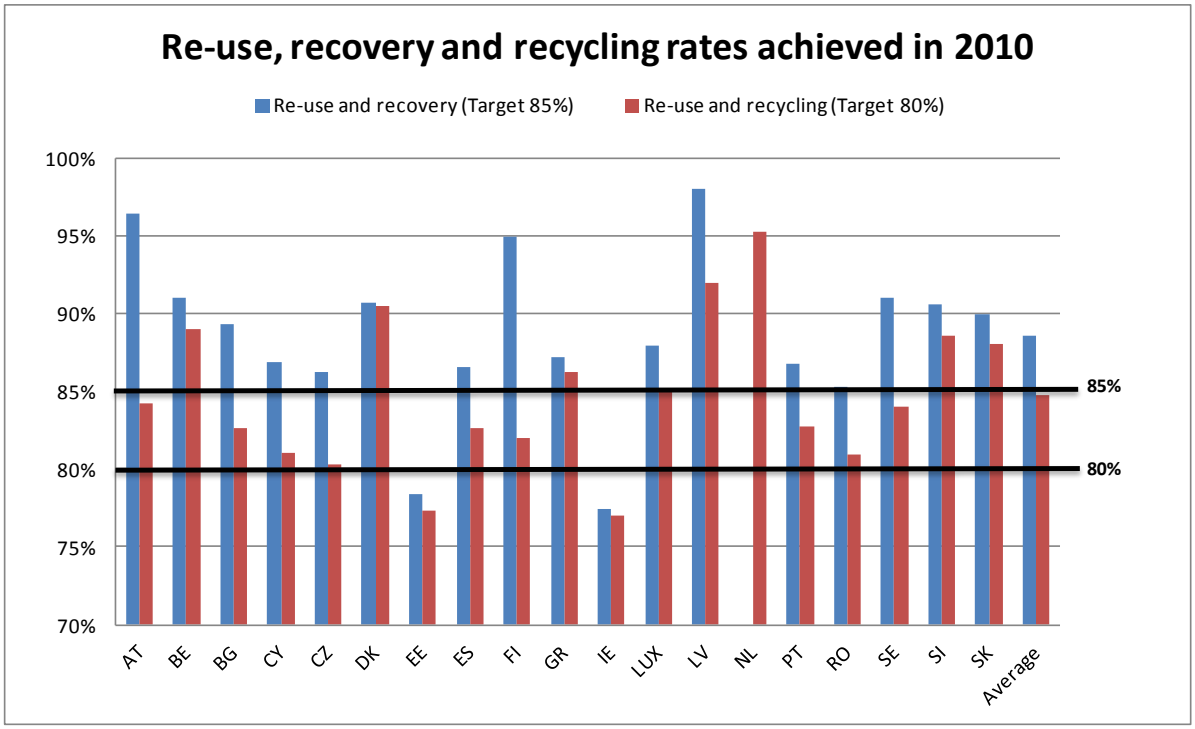


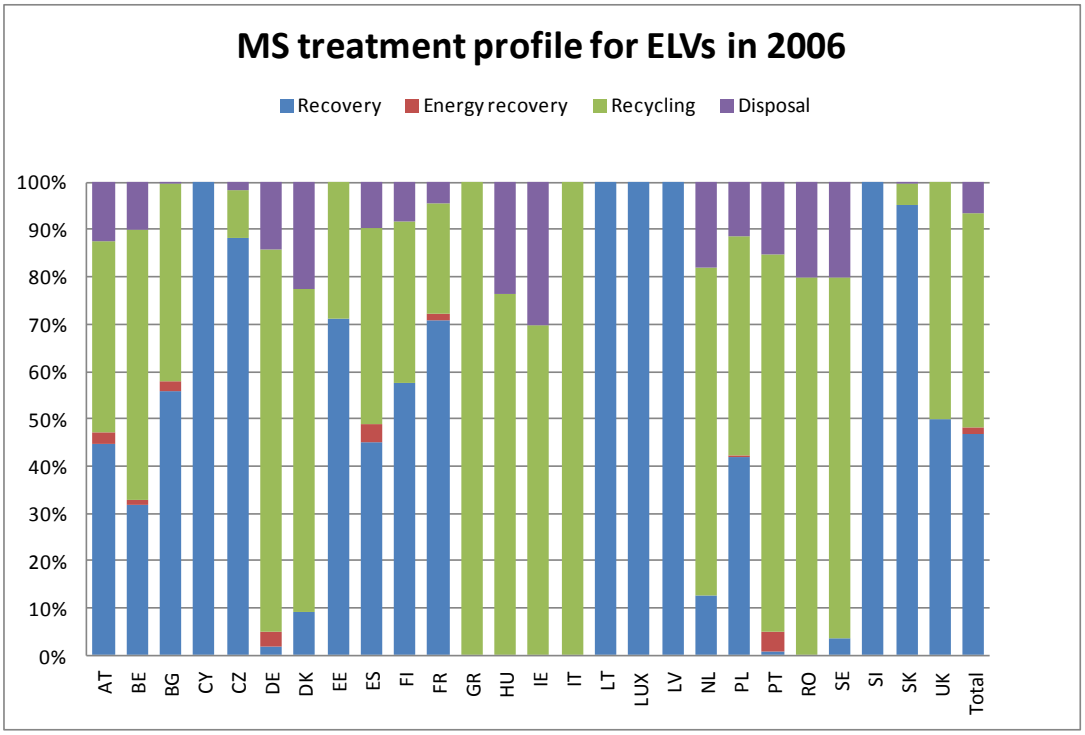
Figure 12: Re-use, recovery and recycling rates achieved by Member states in 2010



Re-use, recovery and recycling rates reported by MS from 2006 up to 2010 show an increasing trend, with more and more MS surpassing the minimum targets. However, target achievement remains a challenge for some MS, notably in 2010 for Estonia and Ireland who achieved re-use and recovery and re-use and recycling rates below targets set out in the ELV Directive.

Re-use, recovery and recycling targets have been compared with data available on Eurostat on the quantities of materials from ELVs recovered, recycled or disposed in MS in order to obtain a global picture of the different treatment processes in use. It should be noted that for some MS and some treatment types data was missing or reported as zero; the treatment profiles shown below could be slightly skewed by such data.

Figure 13: ELV treatment profiles by MS –recycling/energy recovery/recovery without energy recovery/disposal in 2006 [10]



[10] It should be noted that targets in the ELV Directive make reference to a "reuse and recycling" rate and a "reuse and recovery" rate. It was considered more meaningful to break out reuse, recycling, recovery and disposal as separate activities as data on all these operations was available in Eurostat. However, achievement of targets is illustrated in the table below.

Figure 14: ELV treatment profiles by MS – recycling/energy recovery/recovery without energy recovery/disposal in 2007

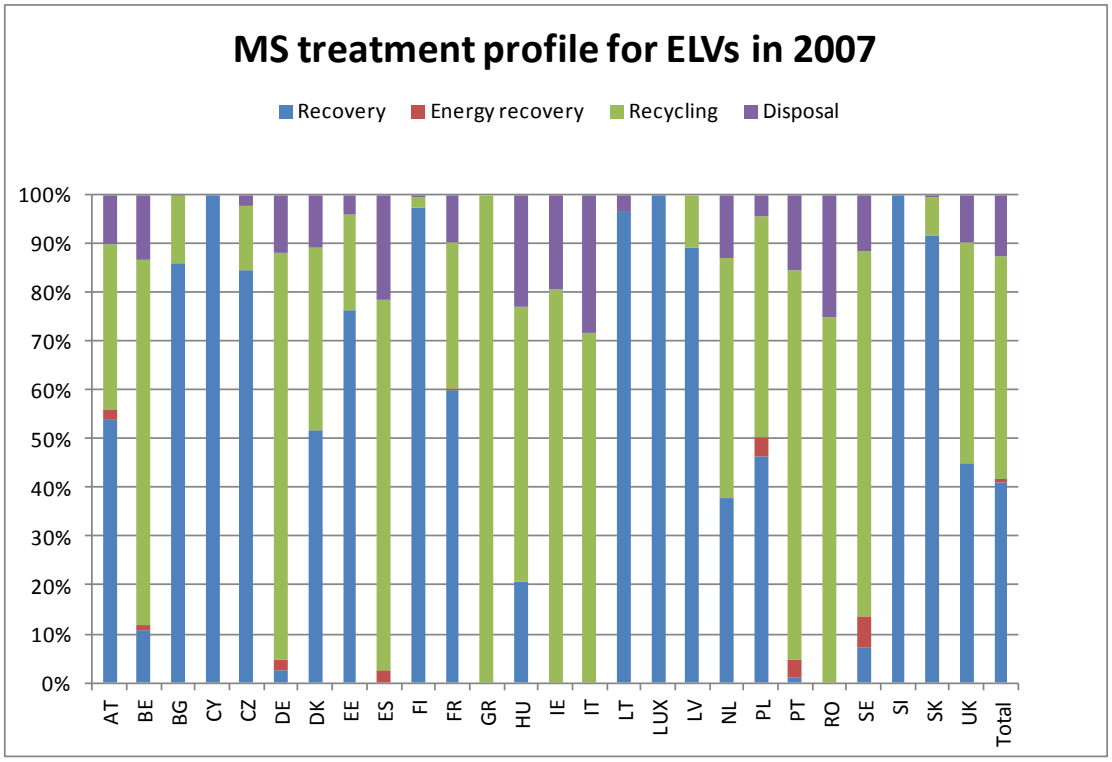


Figure 15: ELV treatment profiles by MS – recycling/energy recovery/recovery without energy recovery/disposal in 2008

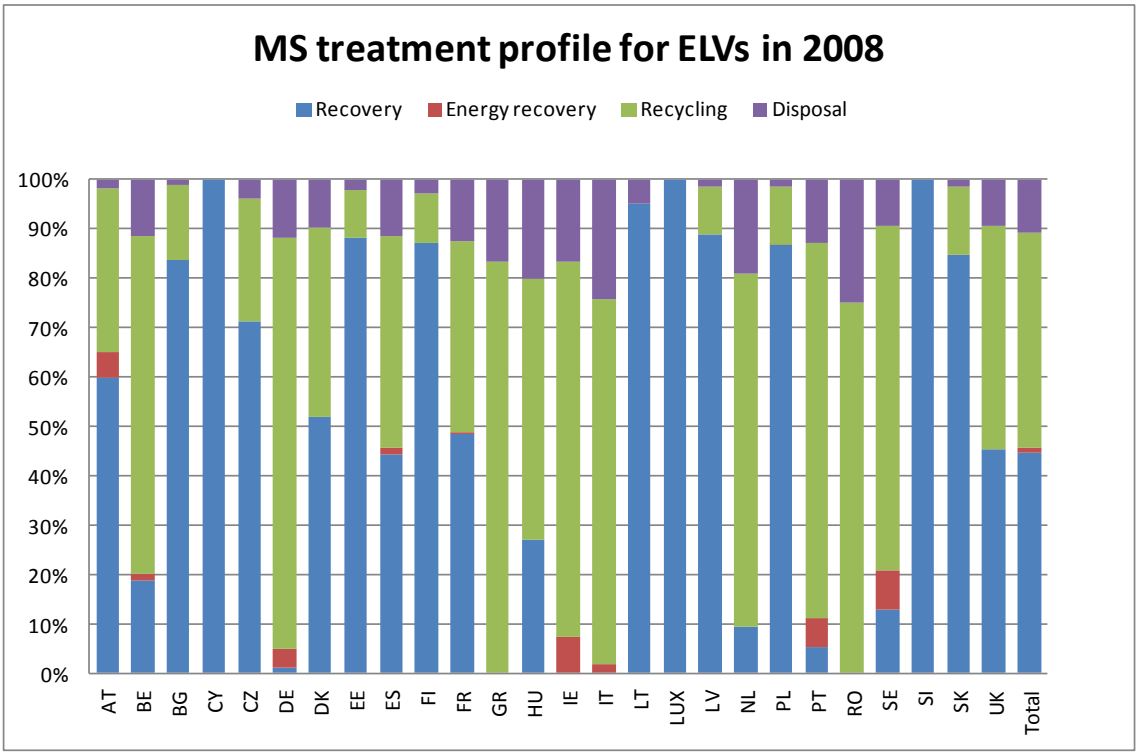
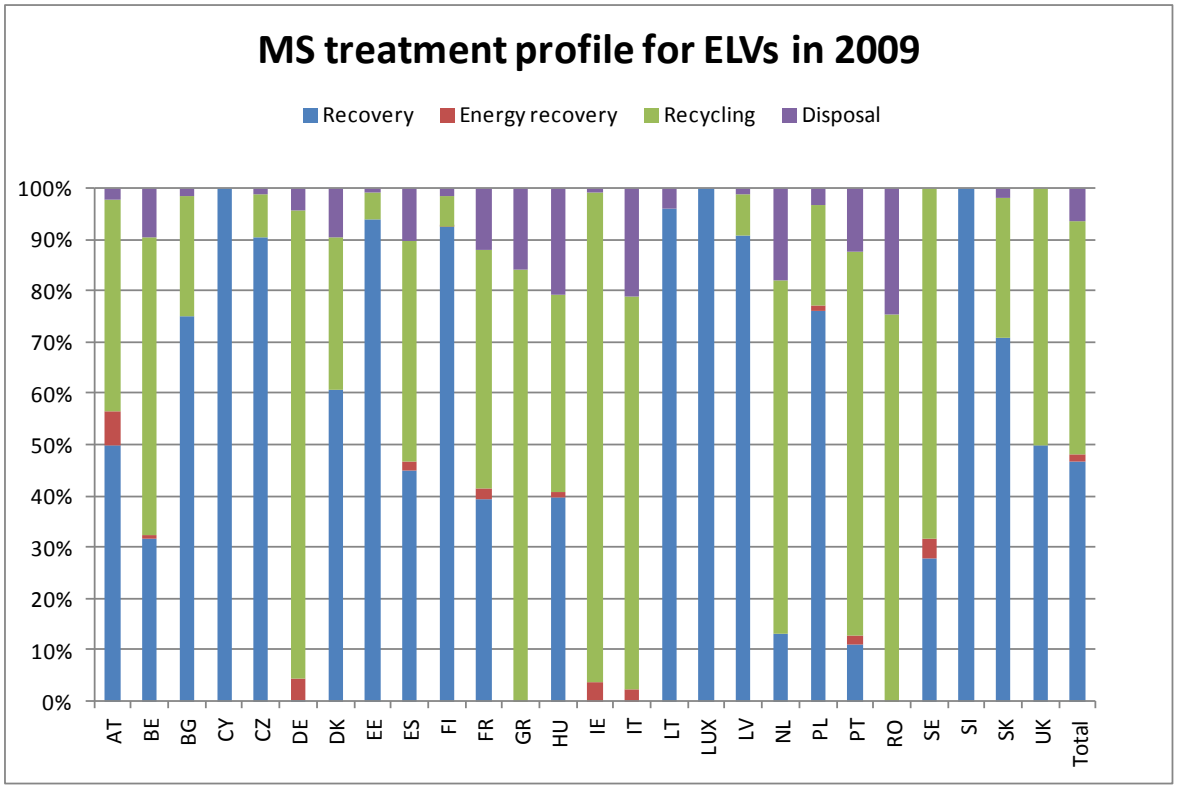


Figure 16: ELV treatment profiles by MS – recycling/energy recovery/recovery without energy recovery/disposal in 2009



6.2.1 Focus on illegal trafficking, use of recycled materials, and market structure evolutions

A few additional key areas have been selected to provide further context on the state of implementation of the ELV Directive and trends which may develop further in the future. Areas covered below include the ongoing issue of illegal trafficking of ELVs, the use of recycled materials as reported by MS and market structure changes noted over the most recent implementation period.

6.2.1.1 Illegal trafficking of ELVs

Given the commercial value of whole or dismantled ELVs on the black market, fighting illegal collection and trafficking of end-of-life vehicles certainly constitutes an important implementation challenge for Member states. The results of a 2010 study carried out by BIO IS[11] on the basis of expert interviews shows that the number of vehicles not finding their way to legal treatment facilities remains quite high in some countries:

[11] BIO IS (2010), Etude de la gestion de la filière de collecte et de valorisation des véhicules hors d'usage dans certains pays de l'UE

Table 10: Estimated proportion of ELVs treated illegally (2010)

Member State	Estimated number of generated ELVs	Number of ELVs legally treated	Estimated number of illegally treated ELVs
Austria	70 000	68 000	Small number
Belgium	± 306 000	131 043	± 175 000
Denmark	± 100 000	102 202	Small number
Finland	± 100 000	14 495	85 000
Germany	≥ 1 100 000	456 436	650 000
Italy	N/A	1 379 000	N/A
Netherlands	± 200 000	192 224	None
Poland	± 1 000 000	150 987	± 850 000
Portugal	N/A	25 641	N/A
Spain	N/A	954 715	Small number
Slovakia	N/A	15 069	N/A
Sweden	N/A	283 450	Small number
UK	N/A	995 569	Small number

Illegal treatment is even the predominant end-of-life path for vehicles in four of the Member States studied. In Belgium, for instance, where strong incentives such as the conditionality of deregistration on the presentation of a certificate of destruction have not been strictly implemented, unauthorised treatment is 1.3 times more common than legal treatment. Similarly, in Germany the number of ELVs illegally treated (often through exportation) is 1.3 higher than that of legally treated vehicles.

More striking are figures for Finland and Poland, where illegal treatment of ELVs is five times more frequent than legal treatment. Finnish estimations include treatment by not yet authorised independent facilities, as well as more straightforward fraud cases such as temporary deregistration to hide illegal demolition. This demonstrates that infringements are related both to regulatory and enforcement deficits. Polish figures mainly account for illegally imported vehicles and centres operating according to illegal treatment procedures.

Available data on increases in the number of authorised treatment facilities show that Member States are, on the whole, reacting to this persisting phenomenon. Belgium has notably multiplied the number of authorised ELV treatment centres within its territory by 2.5 between 2005 and 2010, while Finland has multiplied authorised treatment centres by almost 4[12]. In addition, measures specifically designed to encourage car owners to direct ELVs towards legal treatment centres are being implemented.

Thus, in 2010, the 13 countries examined by BIO IS had introduced 'circulation' or 'road' taxes, which must be paid (usually annually) by all car owners wishing to use their cars. Such policy instruments aim at inciting end-users to declare the disposal of their ELV so as to stop being subject to the tax in question. But taxation, which is only fully efficient when strictly applied (according to BIO IS, this is not the case in Austria, Germany, Finland or Sweden for instance), is not the only option retained by Member State authorities.

Several Member States have introduced 'disposal bonuses', whereby car users are entitled to receive a certain amount of money for any ELV disposed of through legal channels. Such schemes exist notably in Germany, Spain, Finland, Italy, the Netherlands, Poland, Portugal, Slovakia and the UK. Even if not directly targeted at fighting illegal trafficking of ELVs (such measures have been devised primarily to encourage a revival of national car industries in a context of economic crisis), this type of instrument seems particularly efficient in sustaining legal ELV treatment activities. In Germany, for example, the introduction of a disposal bonus brought 1.3 million additional ELVs to authorised treatment centres in 2010[13].

Finally, repressive action against illegal treatment facilities has also been undertaken by some national governments or agencies. As reported by UBA, the UK Environment Agency has, for instance, launched a coordinated national campaign against the estimated 270 illegal ELV treatment centres operating in England and Wales as of April 2008, imposing high penalties. As a result, about half of the sites concerned closed or were brought into regulation in the next 12 months. Portugal has also launched a 'National Plan for the Eradication of Illegal Scrapping' which, according to information provided by Portuguese authorities, has resulted in a decrease in illegal competition. The multiplication of such actions is certainly desirable if Europe is to effectively tackle ELV trafficking in coming years.

6.2.1.1 Use of recycled materials

Nine Member States provided information on the types and quantities of recycled material from ELVs used in the production of new vehicles, or on the state of related markets (Spain, France, Hungary, Poland, Romania, the United Kingdom, Germany, the Netherlands and Sweden). Most other Member States were either not directly concerned due to the absence of car manufacturers on their territory, or unable to quote up-to-date figures.

[12] UBA for EP (2010), ELV: legal aspects, national practices and recommendations for future successful approach

[13] BIO IS (2010)

All Members States having provided data refer to progress in the use of recycled materials, although to varying degrees. According to the Spanish report, all new vehicles placed on the market contain recycled components. A similar assertion is made by Romanian authorities, who state that cars produced in 2010 include recycled polypropylene (from 8 to 30kg in bars and wheel guards), polyamide (up to 3kg in gearbox casing, radiators or air regulators), as well as PET and PE plastics. Local manufacturer Dacia, in particular, adopted a rule according to which all diesel engines produced must now contain 95% of recoverable material and 5% of recycled plastics ('Dacia Eco2 environmental signature').

A reported 483 818 and 13 360 tonnes of material extracted from ELVs were recycled in Germany and the Netherlands, respectively, in 2010. The UK, for its part, though unable to provide exact figures, considers quantities of recycled metals used in new cars to be 'very high'. The British report also states that some manufacturers are using recycled plastics and rubber in certain components, while glass is reported to be recycled into aggregates and tyres into safety surfaces. Finally, Sweden declares that inclusion of recycled materials in production processes is taking place to some extent, although the quantities and types of material concerned differ from one producer to another. The existence of a functioning market for re-used components in Sweden is also cited.

An interesting point underlined by most national reports is the varying quantity of recycled materials used in the production of new vehicles, dependant on the type of material in question. A majority of Member States stated that recycled metals are much more frequently used than recycled plastics. Spanish authorities, for instance, explain that, while 95% of the metals extracted from ELVs are recycled and used as secondary raw materials, the secondary use of recycled polymer-based materials is much more complex given that it is not always possible to set up closed loop recycling for plastics. Similarly, Poland states that mainly recycled ferrous and non-ferrous metals are being used as secondary raw materials in vehicle production (In 2009, 18 271 t of ferrous scrap (steel) and 383.473 t of non-ferrous metals (aluminium, copper, zinc and lead) have been declared as recycling from ELVs in Poland).

The difficulties faced by dismantlers in trying to recycle plastics to be used as secondary raw materials has also been highlighted at length in the French report. According to the latter, even if 177 demolishers (compared with 107 in 2009) declared they are dismantling plastic parts for the recycling industry, volumes thus treated only amounted to around 10 kg/ELV in 2010 (compared with 5.4 kg in 2009), which is equivalent to the weight of a bumper. The national report explains this relatively small number by referring to the low prices of recycled plastics on the market, which discourages dismantlers, as well as a lack of technical skills. However, France insists on the fact that shredding companies are increasingly investing in the recycling of plastics, and that most major car manufacturers have set targets for the inclusion of non-metal recycled materials in their new models (on average 20 to 30 % of overall plastics).

Meanwhile, Hungary, stresses that while ferrous metals (approximately 26 000 t in 2009) benefit from a favourable national market, recycled glass and tyres are not the object of a significant demand. The main explanatory factors cited by Member States to account for such discrepancies are variations in the availability of different types of materials and their degree of recyclability, as well as the technical complexity and costs of the various procedures required, and the commercial value of the recycled product as a secondary raw material.

6.2.1.2 *Market structure evolutions*

A total of 20 Member States have provided information on market trends and competition conditions affecting the car and ELV treatment industries in their respective national reports. Among MS responding, only Spain mentions a general decline in vehicle sales as a consequence of the current economic crisis. Luxemburg, on the contrary, points out that the introduction of a 750€ premium for the acquisition of low-emission vehicles in 2007 has led to an increase in the sales of passenger cars generating less than 120g of Co_2 per kilometre. In addition, the Dutch report highlights that exports of new cars to Eastern European counties have risen, resulting in smaller quantities of ELVs being available for treatment nationally. This is the only negative trend reported by Member States with regards to the growth of ELV treatment industry.

On the whole, evolutions highlighted by national reports in that respect are positive. Germany and Luxemburg both declared that the volume of generated ELVs has risen in the last few years, while the German, Hungarian and Irish reports highlight an increase in the number of authorised treatment facilities. According to German authorities, the number of dismantling and shredding installations has risen between 2005 and 2011, from 1 100 to 1350 and from 33 to 46 respectively. The Irish report states that the number of legal dismantlers reached 165 by the end of 2011, compared with 53 in 2003. Spain and Greece, for their part, asserted that national ELV treatment rates have increased significantly (according to Greek authorities, ELV management has been made available to 97.5 % of the population through the establishment of 79 dismantling and treatment facilities). Spain highlights in particular the positive impact of a reduction in the number of illegal treatment centres on recycling and recovery rates.

Qualitative improvements have also been reported. Estonia, notably, carried out its first shredding experiment in 2011 and foresees the development of post-shredder technologies. Sweden declared that the number of treatment establishments with certified environmental management schemes has increased since 2008. Finally, France reports that a complete reorganisation of the treatment industry is in process owing to the introduction of new national regulation (Decree 2011-133 of 4 February 2011) following condemnation by the European Court of Justice for inadequate transposition of the ELV Directive. Thus, according to the French report: manufacturers are setting up a network of authorised ELV centres; treatment facilities are subject to new requirements including minimum targets for re-use, recovery and recycling; a governing body composed of actors from the manufacturing, shredding and treatment sectors has to report each year on the state of the industry as well as on the achievement of the above mentioned targets and is entitled to recommend corrective measures; and manufacturers have been made formally responsible in case of financial losses in the sector.

Very few negative trends have been reported with regards to overall competition conditions. 14 Member States clearly stated that no distortions are taking place (Austria, Bulgaria, Cyprus, Estonia, Finland, Greece, Hungary, Ireland, Italy, Lithuania, Luxemburg, Slovenia, Spain, and the United Kingdom). Partial or indirect distortions were highlighted by Germany, who asserts that significant quantities of ELVs are still being exported to new Eastern European Member States with a negative impact on the German recovery industry, as well as Belgium, who suspects that some ELVs may be exported to neighbouring Member States as a result of diverging national

interpretations of the provisions related to the processing of glass in particular. That being said, Belgian authorities simultaneously report the existence of intense national competition among shredders, and between shredders and dismantlers. Similarly, Ireland reports the recent creation of a level-playing field for the dismantling and metal recovery sectors. The global picture is therefore rather positive.

Chapter 7: Lessons learnt and suggestions for improvement

With regard to the recurring nature of the questionnaire it is worth mentioning that considerable resources had to be assigned to the re-formatting of the questionnaires. Partly, MS changed the format while filling out the questionnaires; partly, the formatting had been altered in the process of translating the original documents. Three formats (*.xls, *.doc and *.pdf) had been used for the transmissions of the information. In order to facilitate future completeness analysis, it is proposed to further streamline the process by sending out template with "boxes" for the designated question items or even the usage of an online questionnaire tool such as lime survey. Such issues were similar for both the 2008 and the 2011 questionnaire.

Furthermore, the questionnaire does not specifically ask MS to list out the text of the legislation implementing each article, therefore making it difficult to truly assess implementation. It would be recommended that legislative documents transposing the ELV Directive in each MS are either requested from MS as supplementary documents to the questionnaire or that the questionnaire is rephrased to ask for "the specific articles implementing this legislation" rather than "If the answer to question 1.1. is 'Yes', please provide details." which allows for a range of vague responses.

In terms of enabling a comparison between the current reporting period and the previous reporting period, the current structure of the questionnaire also makes this task difficult. Rather than asking "Have measures been taken in relation to Article 5.1?" it may be more meaningful to ask "Have any new measures been taken in relation to Article 5.1?" Currently MS responses for the 2008 versus 2011 reporting questionnaires were very difficult to compare and modifications or improvements were hard to discern.

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Chapter 8: References

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