







An EU funded project

Legal framework, the current situation in end-of-life vehicles management

2nd Workshop
Waste Management Plan on end-of-life vehicles
02nd December 2016

Overview

- I. Current legal framework
- II. Current responsibilities for ELV management
- **III.Current status of ELV management**
- IV. Proposal for amending the legal framework



I Current legal framework Structure of European Waste Legislation relevant for ELV

Waste Framework
Directive

Regulation on Shipment of wastes

European Waste List

Landfill Directive

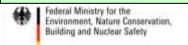
Incineration Directive

Directive 2000/53/EC on end-of-life vehicles

Guidance Document Amendments of Annex II

Component and material coding standards

Minimum requirements for Certificates of Destruction



I Current legal framework Current Serbian Legislation (1)

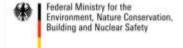
- Law on Waste Management
 - Article 55: Specific regulations on end-of-life vehicles
- Rulebook on end-of-life vehicles (98/2010)
 - Further specific regulations on end-of-life vehicles
- Decree on products which become special waste streams upon their use (3/2014)
 - Environmental tax for vehicles placed on the market



I Current legal framework Current Serbian Legislation (2)

Findings from mission No 17 (21-25 September 2015):

- The Directive 2000/53/EC is only partly transposed
- The transposition is realized by the Law on Waste Management and by the Rulebook on ELV
- The status of the legal instrument Rulebook seems to be inappropriate to meet the EU requirements
- Measures to encourage the economic sector to adopt preventive measures are missing
- Implementation of a collecting system is missing
- Mechanisms to establish a functional system of authorized treatment facilities are missing

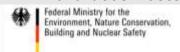




II Current responsibilities for ELV management Current responsibilities for ELV management (1)

	MAEP	AP	LSG	SEPA
Territorial competence	RS except AP AP if operation inside of AP and outside of AP in RS	Only own territory	Only own territory	RS
Issue permits for collection, transport, storage, treatment, recovery ¹ , disposal	HW IW, NHW if operation in more than one LSG IW, NHW in case of incineration All kind of waste treated in mobile facilities	All kind of waste	City of Belgrade: only IW, NHW ² ; all kind of waste, if construction permit issued by City of Belgrade ¹ Other LSG: IW, NHW	
Inspection of installations	HW IW, NHW if operation in more than one LSG	HW IW, NHW if operation in more than one LSG inside of AP	IW, NHW	-

RS: Republic of Serbia; MAEP: Ministry of Agriculture and Environmental Protection; AP: Autonomous Province Vojvodina; LSG: Local Self-Governing unit; SEPA: Serbian Environmental Protection Agency HW: hazardous waste; NWH: Non-hazardous waste; IW: inert waste



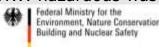


II Current responsibilities for ELV management Current responsibilities for ELV management (2)

	MAEP	AP	LSG	SEPA
Information on issued permits	Own permits	Only own permits	Only own permits	Register of all permits
	Maintain records of permits issued by other competent authorities			(receives information from all permitting authorities)
Information on waste quantities and types	-	-	-	Waste data base (receives information from all waste generators and owners)
Information on	Yes (LWM)	Yes	No ²	No (LWM)
movement of hazardous waste	No (situation since 2015)		City of Belgrade: Yes ¹	Yes (situation since 2015)
Issue notification for waste shipment	Yes	No	No	No
Information on the shipment of waste	Yes	-	-	Yes

RS: Republic of Serbia; MAEP: Ministry of Agriculture and Environmental Protection; AP: Autonomous Province Vojvodina; LSG: Local Self-Governing unit; SEPA: Serbian Environmental Protection Agency

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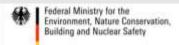




II Current responsibilities for ELV management Current responsibilities for ELV management (3)

	MAEP	AP	LSG	SEPA
Strategy	National Strategy, in cooperation with AP	Participate in development of National Strategy	Participate in development of National Strategy	-
Planning	National Plan, in cooperation with AP ² National Plan ¹ (in reality: in cooperation with AP, LSG + others) Consent to regional plans, except AP	Cooperation with MAEP to prepare National Plan ² (in reality: Cooperation with MAEP to prepare National Plan) Consent to regional plans Plans for certain types of waste that are of importance for AP ²	Regional Plan, if plan comprises more than 1 LSG Local Plan (in reality: Cooperation with MAEP to prepare National Plan)	-
Prevention	Waste prevention programme	-	-	-

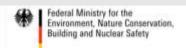
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The different facilities necessary for ELV management

- Collection point:
 - Receives ELV as hazardous waste from last owner
 - Sends ELV as hazardous waste to dismantling facility
- Dismantling facility:
 - Depollution → hazardous waste
 - Dismantling → non-hazardous waste, spare parts for reuse
 - Sends depolluted and dismantled ELV as non-hazardous waste to shredder
- Shredder:
 - Shredding of ELV together with other metal waste (e.g. WEEE)
 - Metals will be recycled
 - Fluff-light fraction goes to landfill or will be treated (Post Shredder Technology)





Sources of ELV:

- M1 = passenger motor vehicles
 From private households and from business
- N1 = motor vehicles for freight transportation < 3.5 t From business

Weight

New passenger car: 1,380 kg

■ ELV: 958 kg



Composition of ELV:

- 55-70% ferrous metals
- 3-8% non-ferrous metals
- 8-18% plastic, textiles
- 2-4% rubber
- 2-5% glass
- 2-5% operating liquids
- 5-10% other materials

Hazardous substances:

fuel, motor oil, oil filter, braking fluid, coolants, batteries, PCBcontaining capacitors



- Classification of ELV:
 - 16 01 04* end-of-life vehicles i.e.: ELV before treatment in dismantling facility
 - 16 01 06 end-of-life vehicles, containing neither liquids nor other hazardous components
 - i.e.: ELV after treatment in dismantling facility



- Total number of registered passenger cars: 1,797,252
- Number of first-time registered passenger cars: 105,393
- Number of imported vehicles:

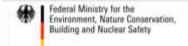
■ M1: 84,300

■ N1: 7,300

Weight of exported vehicles:

■ M1: 144,500 t

N1: 4,500 t





Code	Waste	Quantity (t)
16 01 04*	end-of-life vehicles	1,196
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components	1,830

- Wastes generated under the waste codes for wastes from dismantling of ELV and vehicle maintenance: 29,590 t
- The reported ELV quantities are obviously too low!



Estimation 1:

- Based on the number of newly registered passenger vehicles about 80,000 t should fall out of the car fleet.
- 50% = ELV and 50% = exported vehicles
- About 40,000 t ELV/a



Estimation 2:

- Based on information for the European Member States Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania, Slovenia, Slovakia and Hungary
- 7.0 kg ELV/capita= for Serbia: 50,000 t
- 19 kg ELV per registered passenger cars = for Serbia: 34,100 t
- Mean value = 42,000 t
- → Estimation 1 and 2: 40,000 42,000 t ELV/a



Quantity of treated ELV:

- 16 01 04* end-of-life vehicles: 718 t
- 16 01 06 end-of-life vehicles, containing neither liquids nor other hazardous components: 1,168 t
- This means most probably: The biggest part of ELV are not treated in authorized facilities and/or the biggest part of ELV are not reported officially

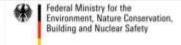


Hazardous ELV 16 01 04*:

- 63 permits for collection
- 63 permits for transport
- 17 permits for storage
- 8 permits for treatment

Non-hazardous ELV 16 01 06:

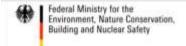
- 264 permits for collection
- 268 permits for transport
- 164 permits for storage
- 131 permits for treatment





IV Proposal for amending the legislation

- Law on Waste Management (LWM):
 - Article 25: addition of articles 25a and 25b in order to fully transpose Article 8 of the Waste Framework Directive (Extended Producer Responsibility)
 - Article 55: legal basis for secondary legislation with specific provisions
- Governmental Order on end-of-life vehicles (GO-ELV):
 - The governmental order replaces the rulebook
 - Structure mainly according to ELV-Directive
 - Partly adoption of regulations from the German ELV-Ordinance





IV. Proposal for amending the legislation Extended Producer Responsibility (1)

Obligations of producers*:

- To provide systems to collect ELV
- To establish, individually or within a collective system, a comprehensive network of authorized collection facilities or authorized dismantling facilities
- Network: no more than 50 km for last holder of ELV
- To take back free of charge ELV of their brand delivered to an authorized facility of their network

Producer* = manufacturer, importer or distributor



IV. Proposal for amending the legislation Extended Producer Responsibility (2)

Exemptions for free take back:

- ELV was not registered
- ELV was registered for less than 1 month
- ELV does not contain essential components
- Waste was added to the ELV
- The vehicle registration book is not surrendered
- The vehicle was not produced and approved in series



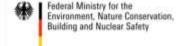
IV. Proposal for amending the legislation Collection

- The last owner transfers ELV only to an authorized collection facility or an authorized dismantling facility
- If last owner is unknown: the local self-government collects and submits ELV
- Operators of collection facilities transfer ELV only to an authorized dismantling facility
- Operators of dismantling facilities transfer ELV only to authorized shredding facilities



IV. Proposal for amending the legislation Certificate of Destruction (CoD)

- Authorized dismantling facilities issue CoD
- Authorized collection facilities may be mandated to hand over CoD to last owner of ELV
- Last owner submits ELV to collection facility or dismantling facility and receives copy of CoD
- The issuing facility sends CoD and registration document to the local unit of the Ministry of Interior
- Ministry of Interior: proof CoD, decommission ELV, void registration document
- Signed CoD will be sent to issuing facility
- Vehicle register: no registration of vehicle is possible





IV. Proposal for amending the legislation Treatment (1)

- Minimum technical requirements for storage, dismantling and shredding (Annex I GO-ELV)
- These requirements most probably mean for existing facilities in Serbia: investment costs (buildings, equipment) higher operational costs especially for depollution
- Treatment facility: requires permit according to Article 33 LWM



IV. Proposal for amending the legislation Treatment (2)

Obligations of treatment facility:

- To strip hazardous materials or components before any further treatment
- To remove and segregate in a selective way hazardous materials and components so as not to contaminate subsequent shredder waste
- Stripping operations and storage shall be carried out in such a way as to ensure the suitability of vehicle components for reuse, recovery and recycling
- To depollute ELV as soon as possible

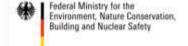


IV. Proposal for amending the legislation Reuse and recovery (1)

The economic operators ensure to meet the following targets:

- as of 01 January 2022*, at the latest:
 Recovery and reuse > 85 per cent of the weight
 Recovery and recycling > 80 per cent of the weight
- as of 01 January 2027*, at the latest:
 Recovery and reuse > 95 per cent of the weight
 Recovery and recycling > 85 per cent of the weight

*: concrete date to be defined by Serbia





IV. Proposal for amending the legislation Reuse and recovery (2)

Estimation in Germany:

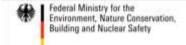
- 75,5 % of the weight of an ELV is metal (65,3% ferrous metals + 10,2% non-ferrous metals)
- 97% of the metal is recovered
- This means for the recovered metals: 73,2% of the weight of an ELV is recovered metal (63,3% ferrous metals + 9,9% non-ferrous metals)
- Relevant for the reporting to EU are only the non-metallic fractions



IV. Proposal for amending the legislation Reuse and recovery (3)

Requirements in Annex I GO-ELV:

- Dismantling facility:
 - as of 01 January 2022*, at the latest: Recycling and reuse of non-metallic fractions > 10 per cent of the weight
- Shredding facility:
 - as of 01 January 2022*, at the latest:
 Recovery of non-metallic fractions > 5 per cent of the weight
 - as of 01 January 2027*, at the latest:
 Recycling of non-metallic fractions > 5 per cent of the weight
 + Recovery of non-metallic fractions > 10 per cent of the weight
- *: concrete date to be defined by Serbia





IV. Proposal for amending the legislation **Violations**

Article 11 of the GO-ELV:

- Proposal for 18 different violations of the GO-ELV
- The concrete amount of the fines has to be defined in a separate regulation



Thank you very much!



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