

COUNTRY REPORT

Legal and Technical Assessment
of the Management of Obsolete
Pesticides

Republic of Georgia



Food and Agriculture Organisation
of the United Nations



International HCH & Pesticides Association



Country Report

Legal and technical assessment of the management of
obsolete pesticides in Republic of Georgia

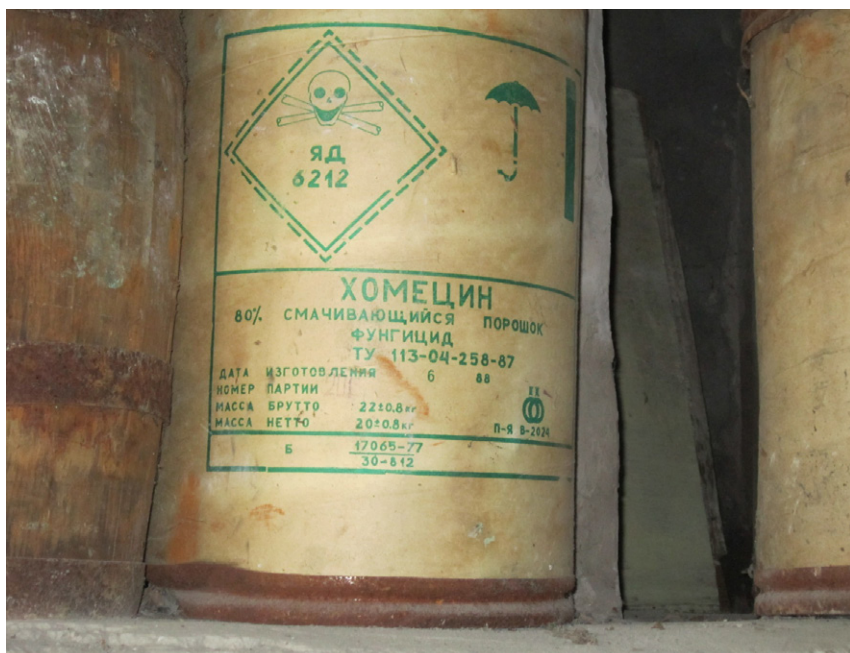
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The European Union and the Food and Agriculture Organization of the United Nations (FAO) have invested € 7 million to assist countries in Central Asia and Eastern Europe to foster an environment of cooperation and capacity development to eliminate the risks from obsolete pesticides and Persistent Organic Pollutants (POPs) and to develop a more sustainable agriculture in the future. This report was prepared by the International HCH and Pesticides Association (IHPA) under a contract from FAO to assess the need for, and legal and technical capacity for, the sound management of hazardous waste in the country and to develop a “road map” for achieving self-sufficiency in sound hazardous waste management in the region.

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Content

Content.....	4
Foreword	5
Acknowledgement	6
List of acronyms.....	7
Introduction	8
Summary	12
Suggestions and recommendations	14



Data, Annexes and Working Document

All original data and Annexes are available in a separate document: 'Working Document, Legal and Technical Assessment of the Management of Obsolete Pesticides, Republic of Georgia'

Annexes:

- Annex 1: Terms of Reference for IHPA for coordination of a Disposal Study for Obsolete Pesticides in the Former Soviet Union
- Annex 2: Draft Report of Waste Inventory on the Territory of Georgia, 2007, Support to the Ministry of Environment Protection and Natural Resources in Improvement of Environmental Planning Framework

Foreword

On behalf of the Ministry of Environment and Natural Resources Protection of Georgia, I would like to express gratitude to all parties involved in the Project “Improving capacities to eliminate and prevent recurrence of obsolete pesticides as a model for tackling unused hazardous chemicals in the former Sovjet Union”. We highly appreciate the publication of the report as an outcome of the study “Assessment of Capacity for Environmentally Sound Disposal of POPs and Obsolete Pesticides Wastes” that has been executed by the International HCH and Pesticides Association and jointly supported by the EU and FAO. The information presented in the report reflects the current situation in Georgia on POPs and obsolete pesticides management and provides a clear understanding on the future activities to be developed in the field of hazardous waste management.

According to the EU-Georgia Association Agreement, we have to strengthen our efforts to meet the international commitments on environmental issues, thereby contribute to the long-term objective of sustainable development. As a party to the multilateral environmental agreements in the field of chemicals management, the Ministry of Environment and Natural Resources Protection of Georgia is responsible to coordinate the implementation of international obligations, particularly management of chemicals according to the Rotterdam Convention, on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and Stockholm Convention on Persistent Organic Pollutants.

Within the framework of Stockholm Convention and the National Action Plan on Persistent Organic Pollutants, the various activities are being conducted in Georgia, such as elaboration of remediation action plan for the lagluja hazardous waste landfill, inventory, collection, packaging and transportation of obsolete pesticides for their safe disposal.

Under the EU/FAO project “Improving capacities to eliminate and prevent recurrence of obsolete pesticides as a model for tackling unused hazardous chemicals in the



former Sovjet Union,” the inventory of obsolete pesticides across the country has been carried out. Moreover, the phase of collection, packaging and preparation for export of obsolete pesticides for their safe disposal is at the final stage. All the provided actions within the project are contributing to the national priorities of our country in chemicals management.

Let me express my hope that the project will be implemented successfully.

Sincerely,

Gigla Agulashvili

**Minister of Environment and Natural Resources
Protection of Georgia**



Acknowledgement

IHPA would like to thank herewith both main authors Mr. David Chichinadze, national legal expert responsible for Part I. The assessment of the legal framework for the pesticides waste management in Georgia and Ms. Khatuna Akhalaia, the national waste management consultant who was responsible for Part II. Technical assessment of the management of obsolete pesticides and POPs waste and soil contamination in Georgia within the framework of a Disposal Study for Obsolete Pesticides in the Former Soviet Union and for their strong engagement and commitment to realize these reports.

IHPA likes to thank Mr. Gigla Agulashvili, Minister of Environment and Natural Resources Protection of Georgia, Mr. Alverd Chanqseliani, Head, Mrs. Ana Berejiani, Chief Specialist and Mrs. Kristina Vardanashvili, Senior Specialist, all of the Waste and Chemicals Management Service of the Ministry of Environment and Natural Resources Protection of Georgia; Mr. Janri Karchava, independent expert; Mrs. Marina Ghvinepadze and Mrs. Irma Tskvitinidze respectively Head and Deputy Head of the division of management of pesticide and agrochemicals, National Food agency, Ministry of Agriculture and Ms. Iordanca-Rodica Iordanova, international legal expert .



We give special thanks for the methodological support, general coordination and encouragement of the work to FAO, Mr. Kevin Helps, former Project Coordinator of FAO-EU Partnership, Mr. Richard Thompson, present Project Coordinator of FAO-EU Partnership Project, Ms. Lalaina Ravelomanantsoa, Legal Officer, Development Law Branch, FAO Legal Office, Ms. Oxana Perminova, Agricultural Officer (Social and Economic Impact) of FAO-EU Partnership Project, Milieukontakt International, Green Cross Belarus and Blacksmith Institute.



List of acronyms

ADR	International Carriage of Dangerous Goods by Road	RRR	Reduce, Reuse, Recycle
BAT	Best Available Techniques	SAICM	Strategic Approach to International Chemicals Management
BEP	Best Available Practices	SC	Stockholm Convention
BC	Basel Convention	UNDP	United Nations Development Programme
CIS	Commonwealth of Independent States	UNEP	United Nations Environment Programme
DOT	US Department of Transport (DOT) classification of dangerous material	UNITAR	United Nations Institute for Training and Research
EA	Environmental Assessment	USSR	Union of Soviet Socialist Republics
EC	European Community	WB	World Bank
EECCA	Eastern Europe, Caucasus and Central Asia	WTO	World Trade Organisation
EIA	Environmental Impact Assessment		
EMP	Environmental Management Plan		
EMTK	Environmental Management Tool Kit for Obsolete Pesticides (FAO)		
EU	European Union		
FAO	Food and Agriculture Organization of the United Nations		
GEF	Global Environment Facility		
GEL	Georgian Lari		
GHS	Globally Harmonized System of Classification and Labelling of Chemicals		
IHPA	International HCH & Pesticides Association		
IMDG	International Maritime Dangerous Goods Code		
IPM	Integrated Pest Management		
MoA	Ministry of Agriculture of Georgia		
MoD	Ministry of Defence		
MENR	Ministry of Environment and Natural Resources Protection of Georgia		
MKT	Milieukontakt International		
N/A	Not applicable		
NEA	National Environmental Agency		
NFP	National Focal Point		
NGO	Non-Governmental Organization		
NIP	National Implementation Plan		
OECD	Organisation for Economic Co-operation and Development		
OP	Obsolete pesticide		
OSCE	Organization for Security and Co-operation in Europe		
PCB	Polychlorinated biphenyl		
POP	Persistent Organic Pollutant		
PRTR	Pollutant Release and Transfer Register		
PSMS	Pesticide Stock Management System (FAO)		
RID	International Transport of Dangerous Goods by Rail (Reglement concernant le transport international ferroviaire des marchandises Dangereuses)		



Introduction

Within the EC / FAO project GCP/RER/040/EC “Improving capacities to eliminate and prevent recurrence of obsolete pesticides as a model for tackling unused hazardous chemicals in the Former Soviet Union” the International HCH & Pesticides Association (IHPA) has been tasked to develop capacity for management of hazardous wastes through the example of OPs and POPs pesticides. There is an estimated 200,000 tonnes of these materials known to be affecting the countries of the Former Soviet Union. Much of the previous work on disposal of waste from the countries has looked to export thousands of tonnes of pesticide stockpiles to high temperature incinerators operated commercially in EC member states. Whilst this strategy meets all international environmental compliance requirements it is prohibitively expensive. The vast distances involved for transport of waste from Central Asian Countries to facilities in Europe makes the option of finding a local solution appealing based on both risk management and cost considerations. Moreover, the huge volumes of hazardous waste generated in the region increases the need for local destruction hazardous waste capacity. Based on the national Legal and Technical assessment reports of the management of OPs that were produced in 2014, the “Road Map to Establishing Environmental Sound Management of POPs Pesticides and other Hazardous Waste in the EECCA region”, was published at the end of 2015



The Disposal Study involved (see Terms of Reference in Annex 1 of the Working document) the following activities:

- Review of existing policy framework for the management and elimination (including inventory, assessment and transport) of POPs and OPs in line with the requirements of the respective EU Directives/ Stockholm Convention;
- Conduct benchmarking of current POPs management (including (temporary) storage and destruction) against international best practice on BAT/BEP as set out by the Basel / Stockholm Convention working groups; highlight and describe best ongoing practices in the country;
- Review of existing and planned treatment options for POPs pesticides, OPs and related hazardous wastes, contaminated containers and contaminated land;
- Assess potential treatment facilities such as existing modern cement kilns, as well as planned and/or implemented pilot plant investigations which can develop in the next years to important market players;
- Assess the Russian-Belarus-Kazakhstan customs union and its implications for hazardous waste in and through Russia, including an assessment of 1) experiences over the last years practical implementation and of 2) alternative transport routes from the republics avoiding Russian territory. This was completed with due reference to the requirements of the Basel Convention;
- Assess access (by road, train or water) to treatment options and economics of transport of waste across the region to treatment facilities/alternative storage facilities; and,
- Review existing POPs data (OPs and PCBs) as far as available, and make efforts to collect, if possible, total hazardous waste stream data as set out in national profiles such as the UNITAR chemicals profile. This was collated for the country in order to assess the potential need for future investment per country/region. Provide estimates of the scale of investments (in terms of tonnes of POPs for disposal) and a rough estimation of their national distribution, tonnes of other OPs, distribution and quantities of contaminated land and contaminated containers;
- Assess status of recycling options for empty containers or already planned or ongoing programs and initiatives;
- Prepare country summary sheets on findings and identify the gaps in information;
- Compile report of study findings, including recommendations for filling the information gaps.

Expected Outputs based on the Terms of Reference:

- i. Summary report of existing policy framework for the elimination and management of POPs and OPs (12);
- ii. Analysis of barriers (technical, legal, economic) to the development of national and regional waste management capacity;
- iii. Report on opportunities for introduction of new technologies (thermal and non-thermal) e.g specific stockpiles (DDT and HCH waste);
- iv. Summary report of existing and potential treatment facilities, pilot plant facilities and empty container recycling facilities/initiatives (12 countries);
- v. Report on POPs waste in relation to total hazardous waste market and approaches for Investment plan for POPs destruction for the region;
- vi. Presentation of the draft report to the SC meeting in February 2015, finalization of the report incorporating received comments.



Part I of the study on the assessment of the legal framework for pesticides waste management is structured into five main sections:

I. General background information (Participation in international treaties)

The introduction includes general information about international cooperation and the state's participation in international treaties in the waste management field. The purpose of this section is to identify and clarify the state's position in the field of waste management at an international level.

II. Regulatory framework on waste management

The first chapter is about the political and legal framework that determines the policies or strategies at the national/federal level aimed at the prevention of waste generation and minimization of risks associated with wastes. Also this section provides a general overview of all national laws and regulations that govern hazardous waste management.

The second chapter on specific laws and regulations that govern waste management is focused on the determination of all laws regarding waste management across different sectors such as: import/export, landfill of waste, incineration, shipment of waste and general waste management.

The third chapter on "Institution(s) involved in waste management (focus on pesticides)" studies the relevant institutions that are involved in waste management, and their obligations and responsibilities, in order to identify the competent organizations that are responsible for waste management planning.

III. Analysis of existing national waste management legislation

This section is dedicated to an analysis of existing national waste management legislation that reflects the legal framework regarding the different activities of waste management such as:

- Register of pesticides waste and general classification of waste
- Licensing
- Trans-boundary movement, import/export rules
- Economic initiatives regarding transport
- Labelling requirements
- Packaging and containers
- Emergency procedures
- Disposal obligations
- Incineration
- Recording, monitoring, and reporting
- Offences and penalties
- Official controls and inspection
- Research and development

IV. Information supplementing legal analyses – from other experts includes three main topics:

- Pesticides manufacturing industry
- Management of OP Stocks – legal provisions regarding the conditions/methods for inventory/storage/disposal activities related to obsolete stocks.
- Methods used for treatment of pesticides wastes



V. Disposal, storage recycling and recovering facilities – practical information from other experts is composed of four topics:

- Disposal facilities
- Storage facilities
- Recycling facilities
- Recovery facilities

This section aims to identify the legal norms that apply to any disposal/storage/recycling/recovery facilities of pesticides waste.

Part II of the study, the national technical assessment (waste management report)

We realized that in order to fulfil the specific conditions on capacity building and benchmarking in each country, as specified in the terms of reference, an adequate analysis of the whole cycle on how to deal with OPs was required. This applies from the very beginning of the process, including who is responsible and who is involved in every step from finding the OPs to the final step of complete elimination. Having carefully worked this out, it was then necessary to design a clear and standardized structure that all national waste management consultants could simply follow in order to assess each step. It was also important to allow comparison between the assessments of each country and therefore it was decided to develop a standardized template for each report using a tabular format. For clarity and brevity the entries have been made as concise as possible.

The report has been built up in four main sections containing a large number of individual items that have been assessed, these being:

1. Benchmarking of current POPs management against international best practice

This section includes detailed information on each step of all actions necessary for elimination of OPs and POPs pesticides:

1. **Institutional arrangements** that include the responsibilities of the concerned organisations in the country.
2. **Inventory** with all national/regional inventory updates, data sources and existing inventories, first National Implementation Plan (NIP), recent NIP update

(specifically on new POPs), UNITAR Chemicals Profile, if existing, National Pesticides and/or POPs Inventory, FAO PSMS Inventory and other information.

3. **Environmental Assessment** consistent with national requirements, and also with International experience often implemented by the UN and other agencies. This includes the capacity of the government and private sector to develop such an Environmental Assessment, as well as the FAO stages in Environmental Assessment (EA) and Environmental Management Plans (EMP) experiences from the FAO Toolkit EMTK v 3.
4. **Inventory and Environmental Assessment Management** including vital questions on the inventory and the assessment, and if the organisational capacity is in place to complete the task. For example if the relevant organisation is in place and also operational, and if so whether all managers and coordinators are in place and operational, as well as if all field teams are established and operational. Also if all Inventory data management people are in place and operational, whether the National/Regional Inventory is being updated or not, a National Pesticides and/or POPs Inventory has been established, and if a contaminated sites register exists or not.
5. **Safeguarding** defining what has been implemented at national and international level such as under the FAO projects.
6. **Storage and transport** includes all items on packaging, containerization, storage and transportation with assessment of transport regulations, driver regulations, existence of storage regulations and available storage capacity, and Incident and accident reporting.
7. **Disposal**, assessing the national, international and FAO experience to date, including reporting on the technologies that have been selected, the process on transboundary transport under the Basel Convention and the national transport within the country, disposal capacities in the country, quality and standards applied (national/international), and current ownership of facilities.
8. **Containers** assessing the national and international experience, the FAO supported plans, amounts and type of empty containers and/or packaging materials, and the use of collection centres for empty containers

2. General overview of POPs and other hazardous waste data

This section has been set up around the following six categories:

- A. Agricultural chemical waste that includes OP waste, POPs pesticides waste and new pesticides waste such as counterfeit pesticides, waste empty containers, and contaminated sites. These contaminated sites consist of burial sites or polygons (landfills) which often contain huge volumes of waste, storage sites, and sites which are still in use;
- B. Industrial chemicals,
- C. By-products,
- D. Petroleum wastes,
- E. Inorganic wastes,
- F. Health care high risk waste.

This effectively means the majority of hazardous waste has been listed. It has also to be mentioned that many of the required data are either preliminary or missing as many countries are in a first stage of such an assessment. Often quantities are listed but not verified in the field. The data also change rapidly as new inventory and assessment activities such as the current NIP updates are planned, so the data can be seen as a “snapshots” of the situation and are likely to be updated again in the near future.

3. Existing and planned treatment options for POPs pesticides, OPs and related hazardous wastes, and contaminated land

This section assesses existing and potential destruction plants, planned facilities and planned and/or implemented pilot plants, as well as existing and/or planned empty container (plastic and/or steel) recycling facilities or initiatives in the country. Data that need to be entered are: type of plant or technology, address/location, contact person (name/contact details) and a brief summary of the technical data, with treatment capacity, types hazardous waste permitted for treatment, permit information, and date of permit. However, it should be noted that there are only a very few plants available in most of the countries.

4. Transportation logistics

This section includes five main issues:

- 1. The assessment of various transport alternatives from main stockpile locations to the existing and or planned treatment facilities including cost estimates;
- 2. Assessment of possible storage networks: waste transfer stations e.g. at main railway stations or at existing landfills (polygons) or waste handling stations;
- 3. Assessment of transport capacity;
- 4. Reference to the requirements of the Basel Convention and previous experience of international export Implications of custom facilities; and
- 5. A brief description of the cases that should be reported.

Due to its clearly defined structure the report is very easy to update periodically, for the use of the national authorities and donors that are interested to support further actions on the elimination of OPs and POPs in the future.

The main report is available in both English and Russian, and all country reports will be accessible in the library of IHPA at <http://www.ihpa.info/resources/library/>

John Vijgen
Director
International HCH & Pesticides Association



Summary

for the Republic of Georgia

It should be noted that the conclusions and recommendations in this report have been made on the basis of the information available in 2014. Additionally, this legal and technical assessment of the management of OPs report was followed by a second report: "Road Map for the Development of Hazardous Waste Management in the EECCA Countries". During the work on the last report the country's conclusions and recommendations have been intensively discussed with the national authorities and national consultant, leading to final summaries of legal and waste management issues, which are then specifically addressed for each country in the Road Map report.



Part I. The assessment of the legal framework on the pesticides waste management in the Republic of Georgia

Major Findings

- Georgia has ratified the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;
- Georgia adheres to the Stockholm Convention. Country signed SC in 23 May 2001 and ratified 4 October 2006. Aim of the convention is to eliminate and/or reduce POPs in the country. But in Georgia there is no legal instrument for regulation specifically POPs chemicals. Most of the chemicals included in the Annexes of the Stockholm Convention on Persistent Organic Pollutants are regulated by the sub Law of 2005 "Law on Licenses and Permits." The sub law defines a category of the chemicals Limited Market Access Materials. Chemicals and Chemical substances included in that category are subject permitting following areas: Production, transportation, import, export, transit and re-export. Such permits are issued by the Ministry of Environmental Protection and Natural Resources of Georgia;
- Except the Law on the Transit and Import of Waste within the Territory of Georgia, based on the Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal, there are no national legislative and regulatory measures adopted by the Government in order to implement and enforce the provisions of the Basel Convention;
- Georgia has also no specific rules established regarding the incineration of hazardous or of any other waste;
- Information on pesticides wastes as collected by public authorities is not accessible for the general public;
- In Georgia, waste is poorly managed. There is only a new frame law called Waste Management Code;
- There are no final disposal facilities in the country;
- There are no regulations established regarding the transportation of hazardous (pesticides) wastes (dealing with issues such as transportation time, place, route, transported quantity, etc.)
- Taking into account the aspirations of Georgia for accession to the European Community, it would be desirable to ensure a better implementation of the *acquis communautaire* in the field of waste management in general and specifically for pesticides and hazardous waste at the national level.
- The institutional framework which defines who is responsible for the issues addressed in this report would benefit from revision. It is recommended to examine the possibility of creating a department/centre that would be directly responsible for chemicals management, including toxic waste and OPs.
- Revision of the legislation and adoption of a specific law on pesticides and hazardous wastes is recommended. At present obsolete legislation on wastes and harmful products is applied in the country.



- Clear benefits would come from adopting a new law on environment protection that could establish new principles and standards for environmental management. This would underpin specific legislation applied to pesticides management and ensure a better context for dealing with issues arising from POPs and OPs, as well as creating an “understanding” between the agricultural sector, which is focused on economic growth, and those concerned with environmental protection
- Mobilization of donor funds, technical capacities, methodological support and local resources (as co-funding) and a focus on polluted sites remediation recommended
- **Analysis of barriers (technical, economic) for the development of national and regional waste management capacity:**
At the moment there is no other waste disposal than landfilling. The foreseen modernization of legislation is expected to create step by step improvements in waste management capacity and waste disposal investments.
- **Analysis of opportunities (technical, economic) for the development of national and regional waste management capacity:**
In the project definition for international support and financing of the large Iagluja remediation project, the establishment of a hazardous waste management center has obtained high priority for the Ministry, in order to build up sufficient national capacity and the necessary field experience.
- **Other findings that need to be addressed:**
Soil remediation and other technologies will be subject of future programs prioritized by MENR of Georgia.

The responsible body for developing and implementing pesticides waste management plans is the Ministry of Environment and Natural Resources Protection of Georgia. The management, monitoring and elaboration of the strategy for toxic waste including Obsolete Pesticides fall under the responsibility of the Ministry of Environment and Natural Resources Protection of Georgia. But as there is no law on waste management, none of these activities can be implemented at present.

Part II. Technical assessment of the management of obsolete pesticides and POPs waste and soil contamination in Georgia

- **Identify the gaps in information (for all 5 sections):**
Information about transportation and implemented projects. Need for update of NIP including new POPs. This will be implemented in a UNEP project together with the National Environmental Agency.



Suggestions and recommendations for future activities

It is recommended that Georgia:

1. Drafts the Legal act clearly prohibiting export of hazardous wastes in accordance with the Basel Convention;
2. Develops the rules and procedures directly regulating movement of hazardous wastes. The law on Import and transit of hazardous waste in Georgia regulating transboundary movement according the Basel Convention already exists;
3. Takes actual measures for the reduction of the generation of hazardous wastes;
4. Develops the national legislation regarding waste management. (the Waste Management Code was developed and adopted in December 2014);
5. Includes all activities in connection to waste management in licensing;
6. Adopts in the future the legislation that enables the environmentally sound disposal and destruction technologies and methods;
7. Establishes adequate disposal facilities;
8. Develops a waste management center for all wastes (hazardous, non-hazardous). Iagluja landfill could be developed into a national waste management center;
9. Enforces the involvement of the public in the improvements in waste management and makes information on hazardous waste collected by the public authorities freely accessible for the general public;
10. Develops pesticides waste prevention programs.

Regarding the progress under Stockholm convention, the following specific recommendations can be made:

- Repackaging and disposal of POPs and POPs pesticides;
- Training of more people from research institutes and private companies in POPs management;
- The NIP needs to be updated and strategies to be worked out with POPs producers and distributors in order to prevent waste generation and especially to avoid accumulation and improve management of empty containers.

As mentioned in the introduction, this report describes the status quo per mid 2014. As during the last months of 2014 and the first half year of 2015 important decisions have been taken regarding as well the approval of waste legislation as the planning of future legislation, it is important to take notice of these recent developments. Therefore a summary including these developments has been included in the Road Map report.





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