



**European Network of the Heads of Environment Protection Agencies
(EPA Network) - Interest group on Plastics
– Working paper –**

Deposit - Return Schemes

Data and figures from 16 member countries of the EPA Network

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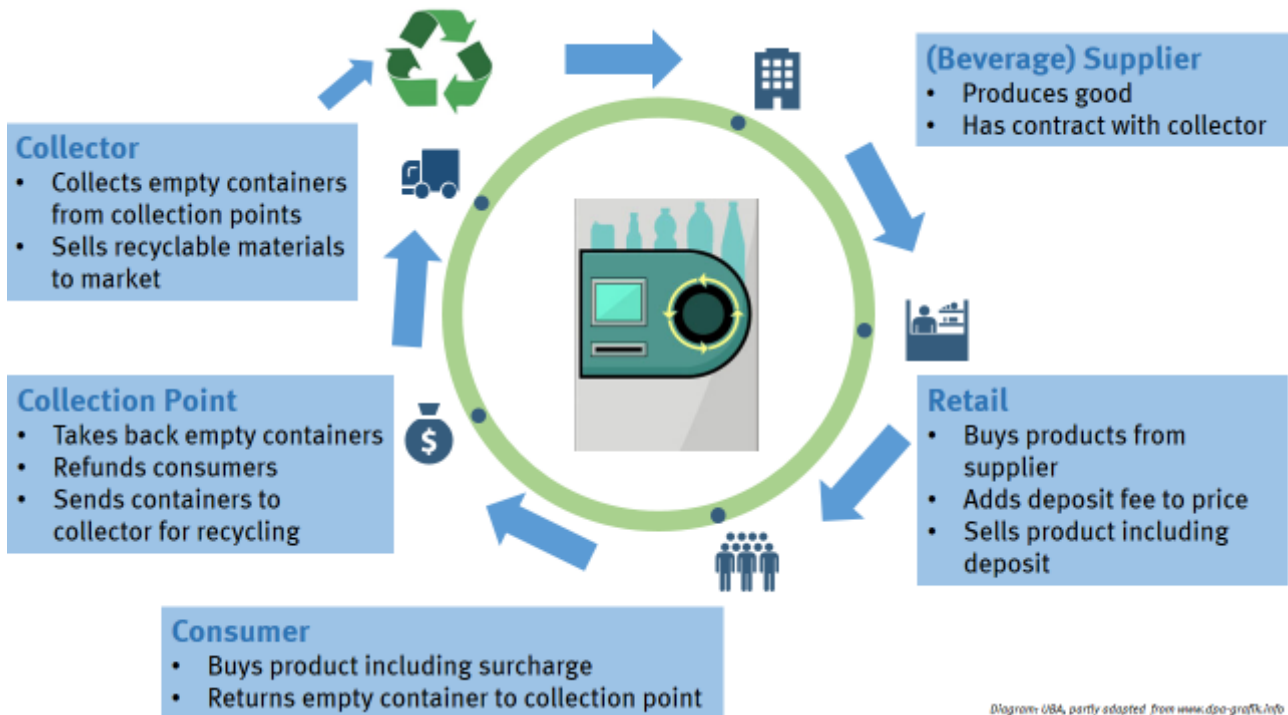
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1. Introduction

Deposit return- schemes (DRS, also deposit- refund system) refer to a surcharge paid when purchasing a product which is repaid once the empty product is returned. They can be understood as one part of a contract: The consumer buys a specific content, for example juice, which then becomes her property. The packaging, in this case a bottle, remains the property of the producer; the consumer only borrows it for a given time and returns it to the owner once she has used the content. The deposit helps to ensure the owner that the packaging is returned.

Often, these systems are in place for reusable packaging, mostly bottles, but other single-use items can be included. In many countries, shopping carts are also part of a DRS. In most cases, producers do not collect the packaging themselves, but have joined a producer responsibility organization that collects, recycles and covers the costs of the service paid by the members of the organization. DRS can provide the same benefits as Pigovian taxes by trying to correct market failures and internalizing negative externalities - in this case, the waste management costs.

DRS mechanisms are implemented in a number of European states. Some of these systems are several decades old, in other cases, the DRS are of more recent date. The age of and thus also the experiences with the systems are not the only difference. DRS also differ with regards to their regional scope (municipal level, regional, national), the kind of packaging collected via the system (often beverage bottles, frequently narrowed down to certain types of beverages; but also cans, packaging material, foils and more), the policy context (sometimes they are part of regulatory measure; sometimes they are the result of industry initiatives), the organization of the system (industry- or retail owned, managed by retail or municipalities, different return points...), as well as the deposit amount. These differences make the systems difficult to com-



pare.

DRS are not free from critique – the OECD study “Addressing the Economics of Waste”¹ concluded in 2004:

“Two bottom lines to mandatory deposits. One, if a product is toxic and should be recovered and recycled carefully, then mandatory deposits are an excellent way of enlisting consumer assistance in keeping the product unlittered and out of landfills (or incinerators). And two, mandatory deposits are a very expensive anti-litter program even when there is no recycling, and mandatory deposits become more expensive when and where there is curbside recycling. Moreover, if the loss of recycling revenue delays or undermines the operation of socially profitable recycling programs, the final cost of litter reduction will be even higher. This is not just speculation.”²

On the other hand, DRS are often praised for their positive effects on the environment. Compared to other collection systems, they are perceived to have mainly three advantages:

1. The financial incentive to return the containers ensures high collection rates, which means that fewer of these containers end up littered in the environment;
2. Recycling is encouraged;
3. The closed loop recycling of single products ensures high-quality recycling.

Because of these benefits, DRS are currently discussed at the EU level in relation to the EU Plastics Strategy. However, it is uncertain whether deposit return schemes could scale up to the European level. First of all, because different systems are already in place in some member states, implementing a European system would disturb established mechanisms. In addition, it is likely that long transport pathways might outweigh the benefits of DRS from an environmental perspective. However, it seems probable that the member states could adopt each other’s best practices. In order to get insight on existing DRS in different European countries and to understand the challenges which frequently accompany the introduction of DRS, this report gives an overview on how deposit - return schemes are organized in different European states.

1.1 Multi-use Deposit Return - Schemes

Multi-use DRS have been established for a long time. This is how they work: a beverage is bottled, transported, and consumed. After that, the bottle is returned, cleaned, and used again. Glass bottles can be re-used more than 50 times³, PET bottles up to 25 times. This saves raw materials and energy, and less CO₂ is emitted than with single-use bottles. Multi-use DRS are usually industry initiatives. Some of these systems have been used for decades, for example for bottles used to transport milk or beer. The amount of the deposit represents the producer’s economic interest to regain its bottles. Reusable bottles are usually made of glass or PET and sometimes come in crates, on which a deposit is added as well.

From an **ecological point of view**, multi-use containers are more advantageous than single-use containers, as long as the transport pathways are not too long- otherwise, the energy costs and CO₂ emissions outweigh the benefits. Multiple reuse cycles of containers save resources and less greenhouse gas is emitted in the production phase than for single-use containers. The advantages of multi-use containers are valid along the entire value chain (production,

¹ See www.oecd-ilibrary.org/environment/addressing-the-economics-of-waste_9789264106192-en

² Ibid., p. 137-138.

³ See for example [www.ifeu.de/oekobilanzen/pdf/IFEU%20Handreichung%20zur%20Einweg-Mehrweg-Diskussion%20\(13Juli2010\).pdf](http://www.ifeu.de/oekobilanzen/pdf/IFEU%20Handreichung%20zur%20Einweg-Mehrweg-Diskussion%20(13Juli2010).pdf)

transport, and disposal) and increases with the repeated usage of uniform containers. These advantages are diminished with the usage of different bottle types, as the logistics get more complicated and costly.

In general, the question of how often a container can be re-used depends on the material, its break resistance and its overall wear and tear. Most often, multi-use containers tend to be heavier than single-use containers because they need to be sturdier. For example, glass bottles can be used up to 50 times, which is considerably higher than PET bottles. At the same time, higher weight leads to higher energy costs for transport.

From an **economic point of view**, initiating and establishing a DRS system is often considered to be very expensive and the question is raised whether the investment is worth it. However, when taking into account the reduced costs for collection of waste, landfill costs as well as cleanup costs, the savings for municipalities are significant⁴.



One 0,7l multi-use bottle can replace 37 1,0l PET bottles.
Source: Genossenschaft Deutscher Brunnen eG.

Multi-use systems in particular require considerable investments in order to establish the collection infrastructure, cleaning facilities for the containers and uniform bottles. Yet the operating costs tend to be lower than for single-use systems. On the one hand, cleaning of the containers raises costs as well as the price for the containers themselves (which is usually higher than for single-use containers because of the specific material requirements) and the transport logistics. On the other hand, because of the lower number of containers used in total, these costs can be recouped.

Because of the higher costs for long transport pathways, multi-use systems are advantageous for **regional distribution** with respective short distances. However, international companies with several decentralized filling plants can also benefit from multi-use containers.

Taking into account the **social dimension**, it should be noted that multi-use systems tend to create more jobs than single-use systems, because there is more workforce needed along the chain (production, transport, cleaning and refilling).

Multi-use systems are an example for extended producer responsibility, as the industry bears the operating costs, responsibility for the material as well as for running the system.

1.2 Single-use Deposit Return - Schemes

From an ecological perspective, single-use containers are less advantageous than multi-use containers, at least when short transport pathways are assumed. More resources as well as more energy are needed for the production of the containers. For longer transport pathways, these negative effects can be outweighed by the benefits.

⁴ See <http://reloopplatform.eu/studies-confirm-that-container-deposit-systems-show-big-net-savings-for-municipal-budgets/>.

A positive outcome for the environment is that collection rates of single-use containers are generally high where single-use DRAS are in place, so considerable amounts of single-origin packaging material can be collected. This supports the use of recyclates and helps reduce resource inputs.

Moreover, single-use systems tend to be more flexible and convenient for the consumer, e.g. because smaller bottles are sold, which is often perceived as useful due to the lighter weight. For international trade, single-use containers simplify procedures because the distribution structures can be streamlined.

1.3 Return rates

Return rates tend to be quite high for deposit systems on bottles, usually around 80+%. Factors influencing the return rates include:

- The amount of the deposit – the higher the deposit, the more likely that the containers are returned;
- The convenience of the collection system;
- Exceptions to the deposit system prescribed by law (such as deposits are only introduced for certain beverage types or packaging sizes).

1.4 Costs

Implementation costs for new deposit systems are relatively high, as the logistics, collection points and, in case of reuse-systems, the cleaning of the packaging has to be established. Retailers in particular have to bear a majority of these costs by providing collection machines. However, in the midterm, these costs can often be balanced with a well-established collection system, material revenues and handling fees.

For the suppliers, costs are lower, as often, only the labels need to be adapted. For international suppliers, exporting to countries with DRS in place, a country-specific label or barcode might be required in order to be able to sell a product. In case of reuse-systems, costs can further be reduced if pool bottles are used – which means that different bottlers use the same type of bottle. Their environmental performance can be especially positive, as they can be transported to the closest bottler, cleaned, and used again.

If containers are not returned, the amount of unredeemed deposits (*deposit slips*) can partly cover the operating costs of the DRS. This can lead to unintended negative effects: especially those retailers whose bottles are not returned benefit from the fact that the bottles either end up in the residual waste, or are littered into the environment.

For single-use systems, revenues can also be gained through the sales of regained packaging materials, which supports the running costs. In addition, the handling fees contribute to covering the costs of the system.

1.5 Deposits and the EU Plastics Strategy

The European Strategy for Plastics in a Circular Economy⁵, published on January 16th, is part of the EU's action plan for a circular economy and aims at closing the material circle for plastics.

It draws a vision of what dealing with plastics will look like in 2030. This vision includes:

- That all plastics packaging placed on the EU market will either be reusable or recyclable;
- More than 50% of all plastic waste generated in Europe is recycled;

⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:28:FIN>.

- Separate collection of plastic waste reaches very high levels;
- EU plastics recycling capacities have increased fourfold since 2015;
- The export of plastic waste is phased out;
- Additives hampering recycling are replaced / phased out;
- The market for recyclates is successfully established and the demand for recycled plastics has grown fourfold;
- Plastics leakage into the environment is drastically decreased;
- Microplastics reaching the seas is prevented.

In this conglomerate of goals, recycling takes a central role. Deposit systems are perceived as one supporting factor, as they “can contribute to achieving very high levels of recycling”⁶. Their main benefit is seen in reducing littering and boosting recycling – the strategy refers to several countries having achieved high recycling rates for beverage containers. Similar results are hoped for when the strategy mentions possible deposit systems for fishing gear lost at sea in order to prevent the introduction of litter into the marine environment from seaside.

While deposit schemes are not further spelled out in detail, the positive role they can play in promoting recycling and reducing littering is clearly recognized. Despite the fact there are no immediate measures proposed in the Plastics Strategy, there seems to be a favorable view on the further promotion of deposit systems especially for fishing gear and for beverage containers⁷.

1.6 About the questionnaire

The aim of this report is to provide an overview on DRS in different member countries of the EPA Network. The EPA Network is the European Network of the Heads of Environment Protection Agencies. This questionnaire addresses what product groups the DRS cover, since when they are in place, and what the fees and collection rates rate in different member countries are.

It can be assumed that not all participants used the same criteria to distinguish between relevant DRS and those considered less relevant. To give one example, nation-wide DRS for water bottles would most probably be mentioned here, but smaller-scale systems, such as reusable cups used during festivals, might not be considered relevant by all. In addition, there is no certainty that all respondents are aware of all systems that are in place – as some of them might operate at a subnational level or may only be used by a specific group of people, so respondents might not know these systems exist. Roughly, most respondents probably only referred to mandatory systems, while voluntary ones have not been considered by all. This should be taken into account when reviewing the report. Finally, it should be noted that this is not a representative survey and the sample size was small – replies were received from Austria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Iceland, Ireland, the Netherlands, Norway, Spain, Sweden, and Switzerland.

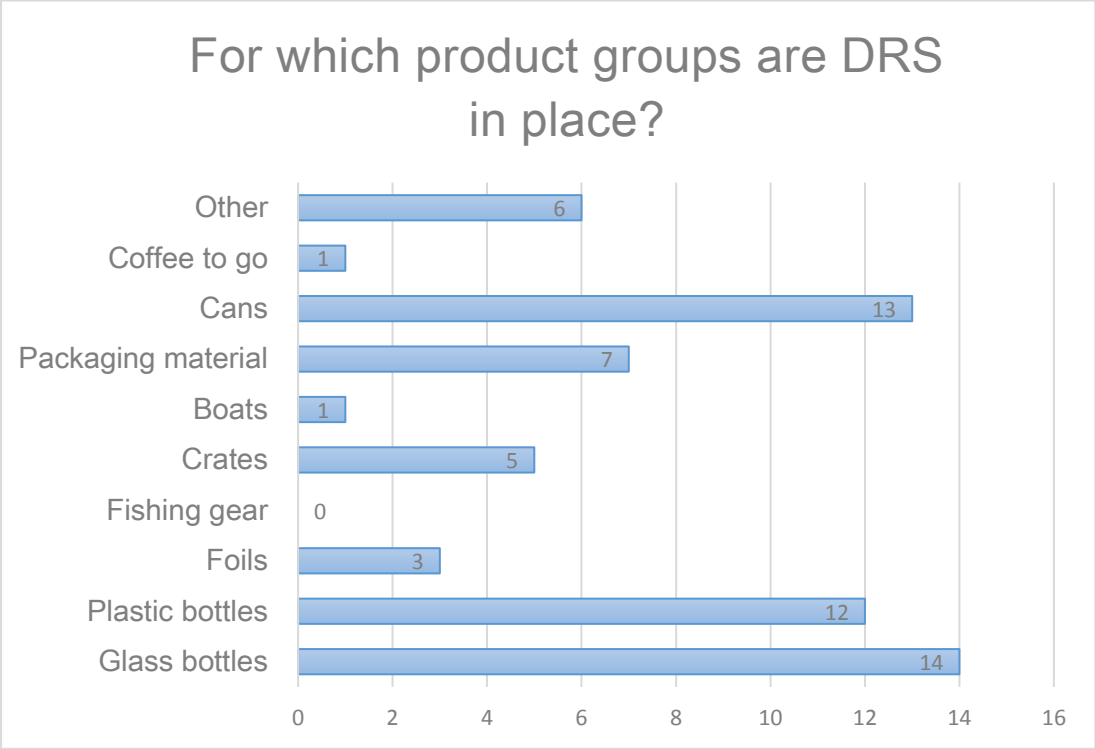
2. Product groups

The first question addressed the product groups for which DRS are in place. 14 respondents stated that DRS exist for glass bottles, followed by cans (13) and plastic bottles (12). Packaging

⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:28:FIN>, p 11.

⁷ Both are also mentioned in the Annex published together with the Plastics Strategy: http://eur-lex.europa.eu/resource.html?uri=cellar:2df5d1d2-fac7-11e7-b8f5-01aa75ed71a1.0001.02/DOC_2&format=PDF.

materials (8) and crates or pallets (6) were also mentioned by a relatively large group of respondents, while foils, systems for coffee to go -cups and batteries (3, 1 and 2 replies) are less common. There are two countries with DRS for waste of electrical and electronic equipment (WEEE).

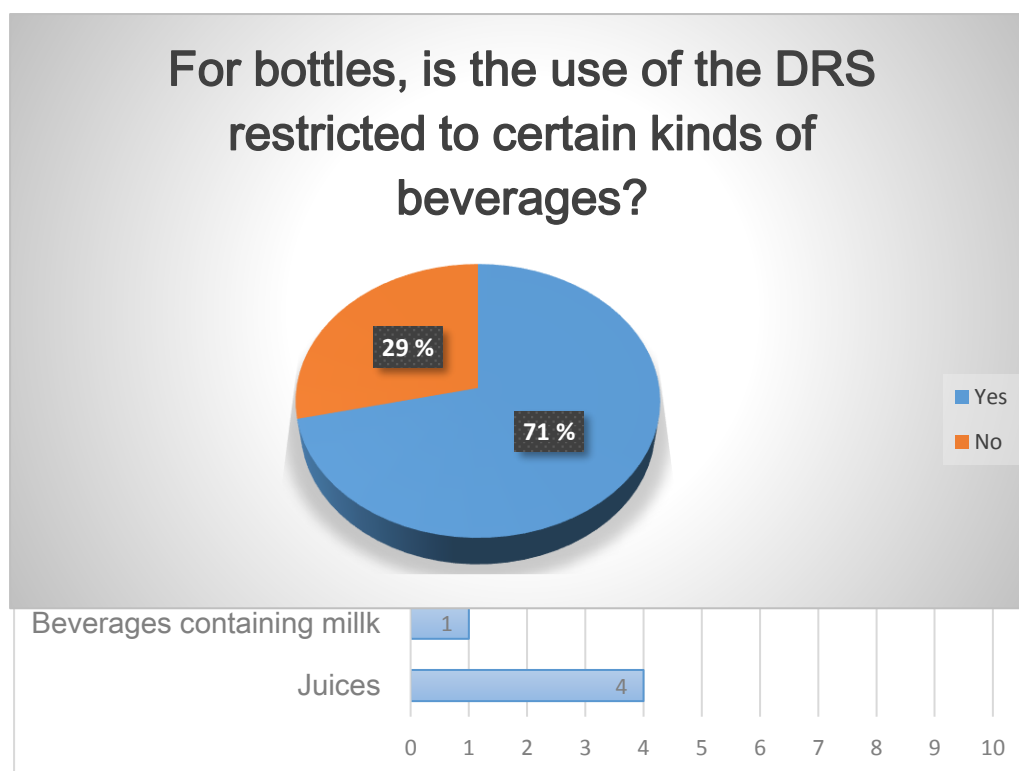


On the other hand, no respondent was aware of DRS for boats or fishing gear.

Individual answers included gas bottles, tires and syphon cartages. Spain indicated that there is a deposit system for commercial packaging in place for beverages sold in hotels and restaurants. This system includes crates and pallets. The rates are fixed by the distribution sector. In Switzerland, there is a deposit system for multi-use beverage containers in place, but this market is very small. Return schemes (without deposits) are in place for other waste streams, namely batteries, electrical and electronic equipment, PET bottles, and aluminum cans.

3. Types of beverages covered by Deposit Return - Schemes

The majority of DRS for bottles is restricted to certain kinds of beverages. 29% answered that this was not the case (with one abstention). In most cases, DRS are in place for soft drinks (11), followed by beverages with gas and alcoholic beverages (10 each). Wine and juice are part of a DRS mechanism in five and four cases respectively, beverages containing milk, beer and (mineral) water in two cases each.



Individual replies pointed to more specific arrangements:

- All drinks ready for consumption, except drinks that contain 50% or more dairy products, vegetable, fruit or berry juice;
- beer, alcoholic beverages with low ethanol content, cider, perry and soft drinks;
- fruit syrup beverages;
- specific soft drinks in glass bottles.

4. Deposit rates

Deposit rates vary from country to country; but also within countries, partly considerably different rates exist for different containers (sizes or type of beverage).

Country	Container type	€
AT	Beer	0,20€
	Mineral water	0,30€
	Cans	0,15€
	Plastic bottles (<0,35)	0,10€
CZ	Wine, beer, juices, soft drinks	0,16€
	Mineral water (0,7)	0,04€
	Gas bottle	Market price ⁸

⁸ According to Government Regulation No. 111/2002.

Country	Container type	€
DE	Reusable glass bottles	0,08€/ 0,15€ ⁹
	Single-use PET bottles	0,25€
	Single-use cans	0,25€
DK	Beer, Juice with added water, Soft drinks - depending on bottle size	0,20€ - 0,40€
	Mineral water (0,7l)	0,13€
EST	Not specified	0,10€
FIN	>0,35l and <1l	0,20€
	>1l	0,40€
	Glass bottles (all sizes)	0,10€
HR	Not specified	0,67€
HU	Juices / soft drinks (0,2l)	0,06€
	Fruit syrup beverages (0,5-0,7l)	0,25€
	Wine beverages (0,75-1,5l)	0,13 – 0,40€
	Beer beverages (0,5-1l)	0,04 – 0,33€
	Beverages with gas (0,5-1,5l)	0,99€
ICE	Plastic and glass bottles, cans	0,13€
IE	Not specified	0,25€
NL	PET bottles <0,5l	0,25€
NOR	<50cl	0,10€
	>50cl	0,26€
S	PET bottles, metal cans	0,10-0,20€
	Amounts vary for crates and pallets	
SK	Not specified	0,13€
ES		Different amounts
CH	Multi-use beverage containers	0,2 and 0,5 CHF

5. Return rates for different product groups

In all countries with DRS in place, return rates for bottles are **at least around 80%**, often considerably higher. This means that the systems function well - and that all bottles brought back into the system are not littered in the environment. Some countries gave more specific numbers:

Austria

For mineral water and beer bottles made of glass, return rates are very high. For batteries, the rate is approximately 55%, for WEEE 49%, and for PET bottles, 3 out of 4 bottles are collected.

Czech Republic

The return rate for packaging material (all materials including plastic bottles and foils, glass bottles, cans) is 79,5% for the material collected from private household and small business which have a written contract with the municipality to use the system established by the municipality in 2015.

Denmark

The total return percentage of disposable packaging with deposit is 90%. The *Dansk Retursystem* is a non-profit environmental company that exclusively operates the deposit and return system in Denmark.

⁹ Depending on beverage type: deposit for glass beer bottles is 0,08€, glass bottles for mineral water 0,15€.

Finland

Return rates for cans lie at 96%, for plastic bottles at 92%. Single use glass bottles are returned to 88%, reusable ones to 97%.

Germany

In Germany, approximately 98% of all PET bottles, 98% for single-use and 99% of cans with deposits are returned.

Iceland

About 85-90 % of the beverages (glass and plastic bottles and drinking cans) are returned. In the years 2011 and 2012 it was 87% and 90% in 2014. The rate has been dropping in the last few years, down to 85 % in 2016 (aluminum appr. 90%, 87% in PET and 83% in glass). It is assumed that the increasing number of tourists that are unfamiliar with the deposit-return system are mainly responsible for this slight decline.

Ireland

Ireland claims that more than 95% of gas bottles are recycled.

The Netherlands

For large PET bottles, return rates lie at 95%.

Sweden

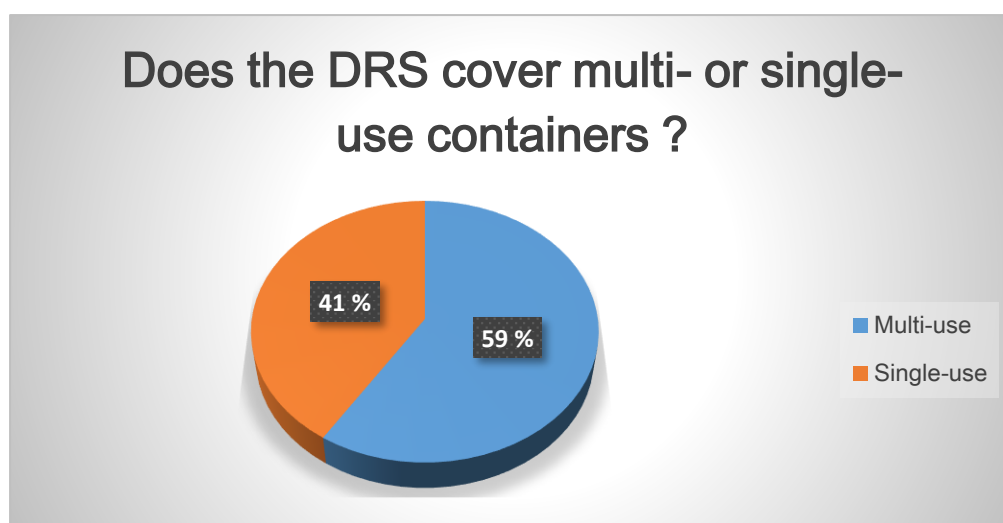
In Sweden, return rates for glass bottles are 94%, 83% for PET bottles and 92% for cans.¹⁰

Switzerland

93% of the glass bottles are returned in Switzerland and 83% of the PET bottles. Aluminum cans reach 86%.

6. Single- or multi-use Deposit Return - Schemes

DRS can refer to systems in which containers are returned and recycled into new containers, or they refer to containers returned, cleaned, and refilled. The latter variety includes for example water and beer bottles, but also for yoghurt glasses. PET bottles can also be refilled multiple times before they are recycled or burned. Glass bottles face the disadvantage that transportation costs are relatively high as compared to plastic bottles. However, they tend to be sturdier, and can be refilled more often than PET bottles.



¹⁰ <http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/avfall/forpackningar/Forpackningsrapport161028.pdf> and <http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/avfall/forpackningar/Forpackningsrapport161028.pdf>.

In most countries from which we received replies, more DRS are in place for multi-use containers (13) as compared to single-use (10).

7. When was the Deposit Return - Scheme introduced?

While in some countries, DRS have been used for a long time, others introduced the measures more recently. For the latter, there is a chance that they have to compete with well-established curbside systems. This might also hamper the introduction of new DRS, as return systems might be perceived as a retrograde step compared to collection systems.

Here's an overview of all respondents:

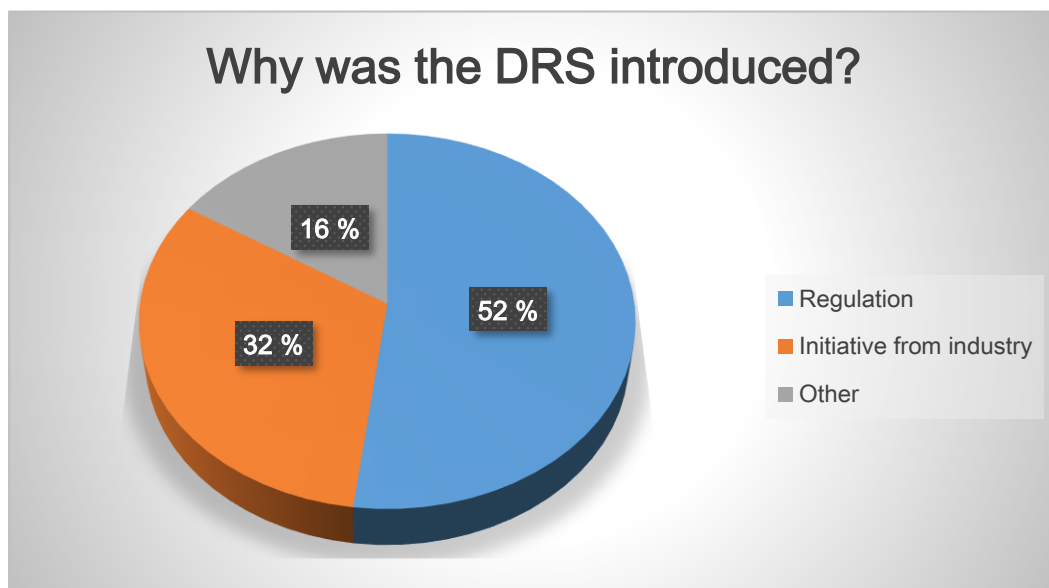
Introduction of Deposit Return - Scheme	
Year	Country
Refillable bottles since 1929	Germany
1950s	The Netherlands
Recyclable glass bottles since 1950s	Finland
1976	Spain
Cans since 1984	Sweden
Before 1989	Czech Republic
1989	Iceland
Before 1990	Slovakia
1993	Austria
1993	Norway¹¹
Single-use PET bottles 1994	Sweden
Since 1996 for cans	Finland
2000 for beverage packaging	Switzerland
2002	Denmark
Single-use beverage containers since 2003	Germany
2005	Hungary
2005	Croatia
PET bottles and cans 2006	Sweden¹²
2008 for PET bottles	Finland
2011 glass bottles utilised as materials	Finland
2016	Cyprus

¹¹ This is when the regulation came into force, however, the respondent indicates a gradual development.

¹² Before that, there was a voluntary system in place.

8. Reasons for the introduction of Deposit Return - Scheme

DRS systems bear a number of benefits for the environment, especially due to the fact that littering decreases. However, establishing comprehensive systems, which usually include setting up machines where containers can be returned, organizing the logistics and educating the consumers, is a costly endeavor. In some countries, the expected financial expenditure prevents countries from introducing DRS. In other cases, governments decide to establish respective regulations due to the expected benefits. In Germany, an obligatory deposit was introduced in 2003 in order to support and promote the use of multiuse containers, which had decreased considerably compared to single- use bottles.

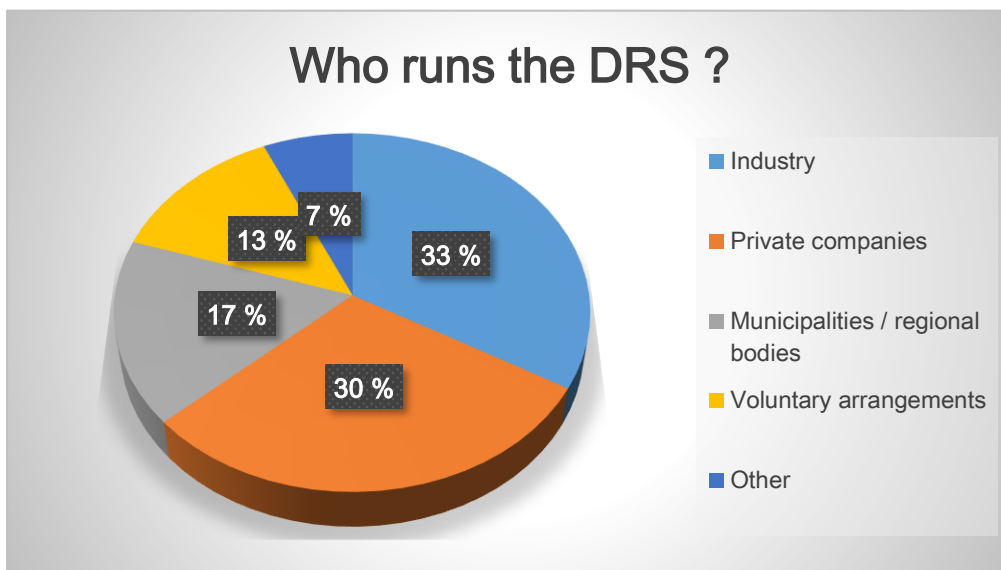


In fact, in most cases analyzed in the survey, DRS were introduced as a consequence of a regulation (13 replies). 8 respondents stated that the introduction was an initiative from industry side, while 4 named other reasons. It should be noted that there might be initiatives at smaller scale, such as for coffee to go- cups from bakeries, that are not represented in this questionnaire. These systems are usually voluntary initiatives from retail.

9. Operators of Deposit Return - Scheme

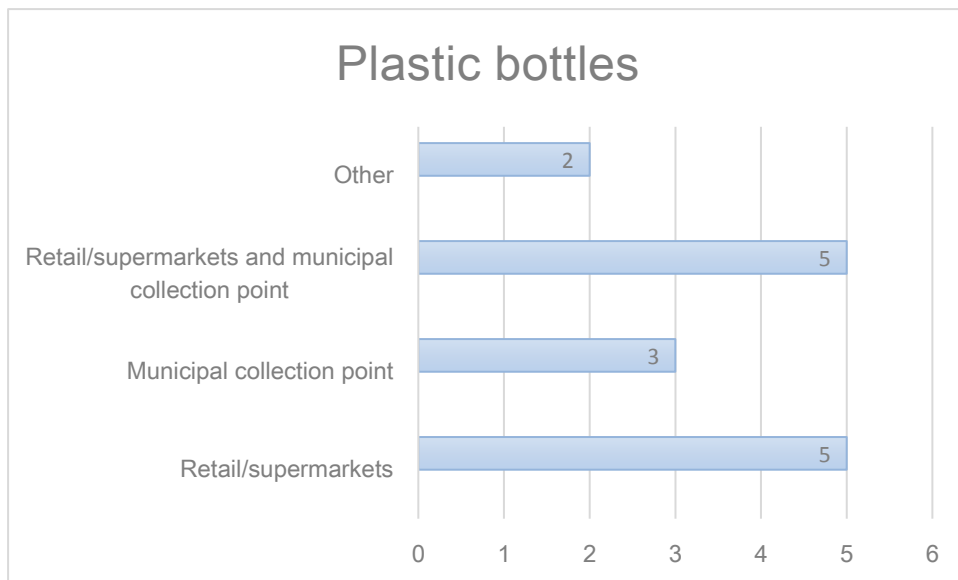
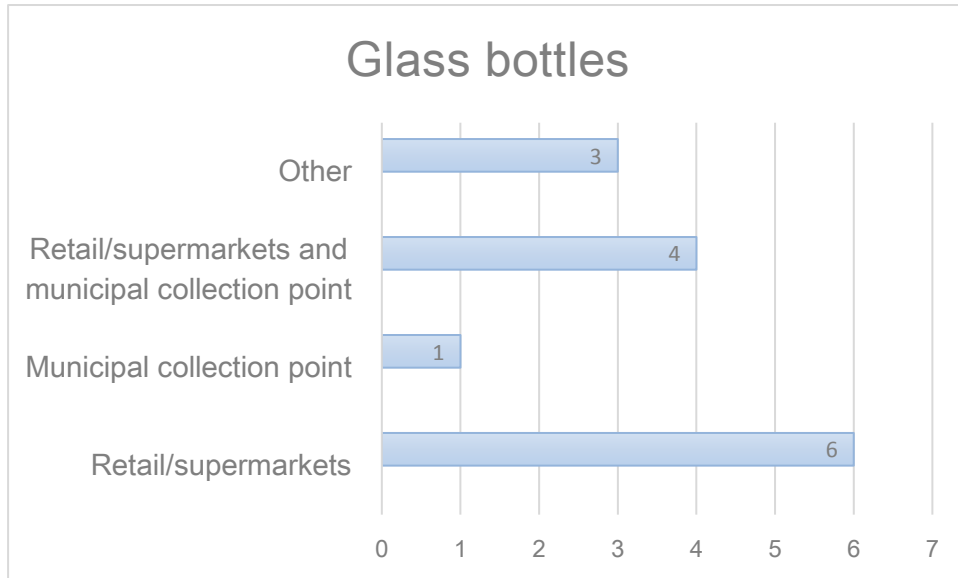
Establishing and operating deposit systems can be costly and the implementation needs to be carefully organized in order to be efficient. Therefore, it is crucial to determine who will be responsible for the operation of the system.

In our survey, most respondents stated that the DRS systems in place are operated by industry (11 replies), followed by private companies (9 replies). Five respondents indicated that the systems are run by municipalities / regional bodies, while three named voluntary arrangements. In the Netherlands, a mixed system is in place: “The large plastic bottles are collected through the deposit system, but the small plastic bottles along with other plastic packages are under responsibility of the municipalities”. In Estonia, producer responsibility organisations are responsible for running the DR; Hungary has established an extra-budgetary fund called *Environment Protection and Energy Efficiency Fund*.



10. Collection points

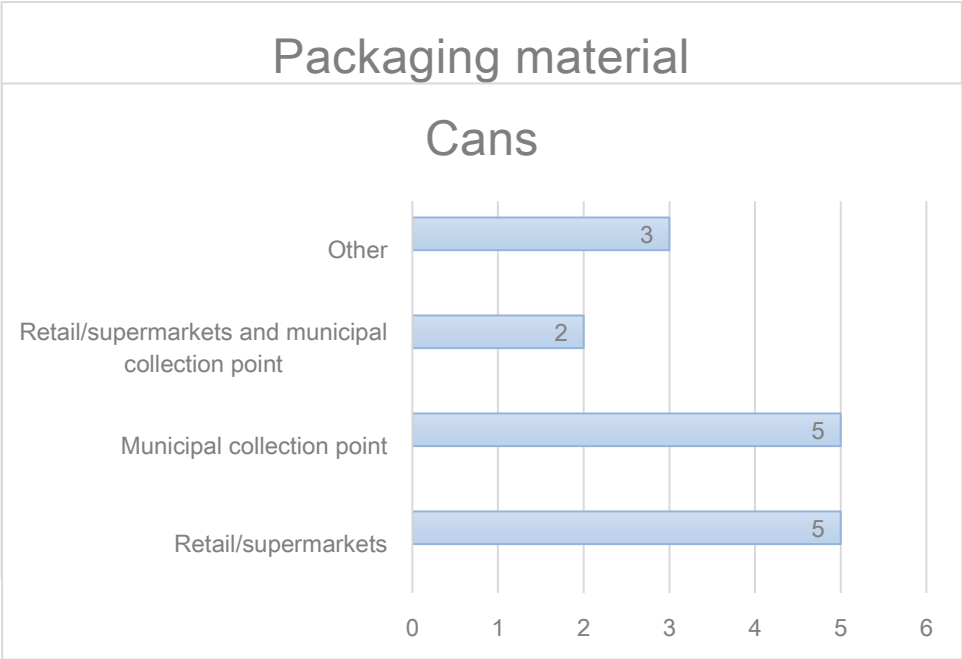
A common complaint related to waste management issues is the lack of efficient collection or the fact that an extra effort is required to collect and sort waste. Accordingly, door-to-door collection is often considered a key factor for the success of waste management. Deposit systems contradict this assumption, as they usually function differently: the used product is not picked up, but consumers bring it to collection points after usage. Collection points can be found in supermarkets and other shops, or at locations in the municipality. The key factor here is the financial incentive to return the container – which apparently outweighs the inconvenience of having to bring the container to a collection point.



Glass, cans and plastic bottles are collected most frequently at supermarkets (6 / 5 / 5 replies). Municipal collection points are a bit less often used (Plastic bottles 3, glass bottles 1, packaging material 4, cans 4). In some cases, both options are in place – here, bottles are collected (4 and 4), packaging material and cans in 2 cases respectively.

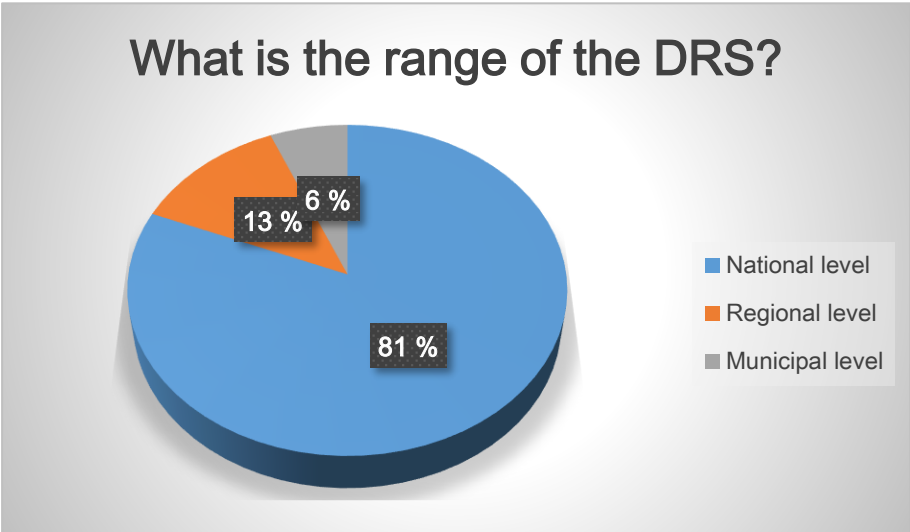
The respondent from Switzerland points out that for aluminum cans and PET-bottles, the responsible voluntary systems are responsible to run a collection system with an exhaustive and convenient coverage, while for glass bottles, communities are responsible to run a collection system with an exhaustive and convenient coverage.

In Norway, there are additional voluntary collection points, such as in cafes or restaurants.



11. Geographical range of Deposit Return - Schemes

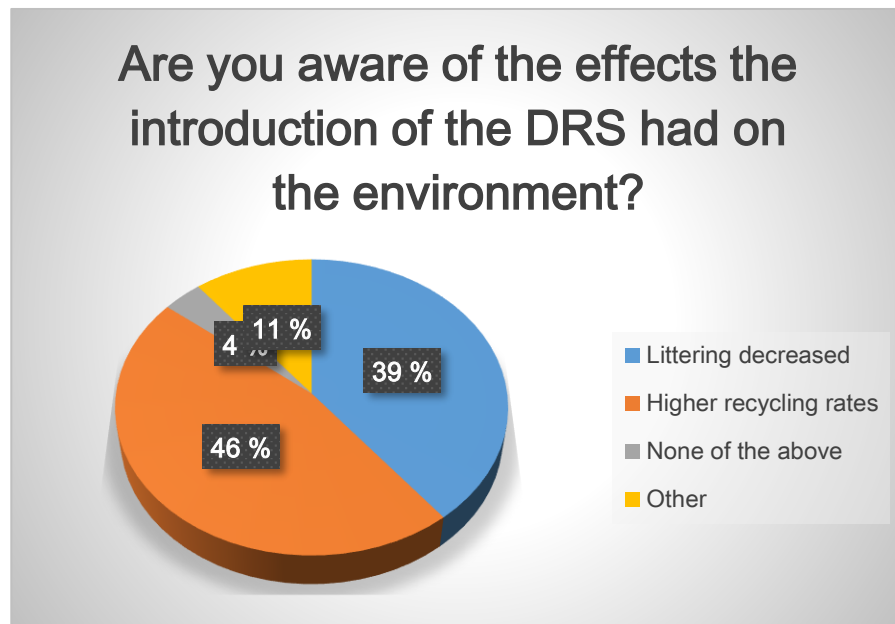
DRS can be operated at different levels – at the municipal, regional, national, or potentially even international level¹³. In general, systems that cover larger areas are convenient for the customer, as packaging can be easily returned in many places. However, the bigger the range of a DRS, the more complicated and costly the organisation. Moreover, the convenience for the customer and the environmental costs of a system do not always go hand in hand. As a rule of thumb, the more regionally a system is operated, the more beneficial it is for the environment, as the environmental costs of transport and use of resources are comparatively low. This is a potential trade-off that needs to be balanced for each product.



In the survey, participants were asked about the range of their DRS. 15 out of 16 respondents claimed that the DRS is operated at the national level; only two reported of initiatives at the regional / municipal level. Again, it is likely that smaller initiatives, such as for coffee to go-cups, are not represented in the answers to this questionnaire.

¹³ See e.g. <http://www.norden.org/en/news-and-events/news/nordic-deposit-system-costs-too-much>.

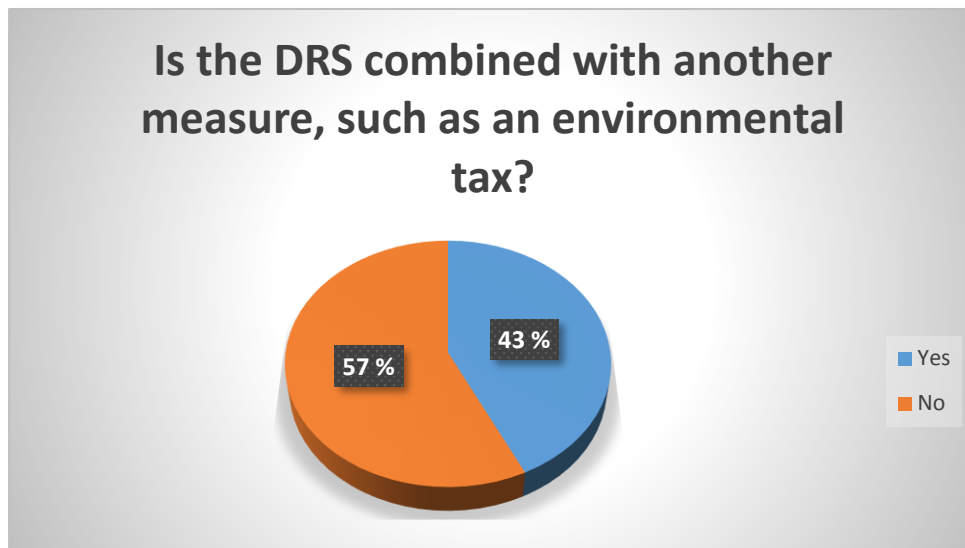
12. Effects of Deposit Return - Schemes on the environment



DRS are often introduced because of the assumed positive effect on the environment. The numbers are hard to estimate especially for littering, but there is widespread consensus that the impact is significant.

Participants were asked which effects they perceive as most relevant in their countries. Most respondents indicated that recycling rates have gone up as a consequence of the introduction of DRS as well as an decrease in littering (13 and 11 replies respectively). Norway in particular indicated increased consciousness among consumers and trust in deposit systems.

13. Deposit Return - Schemes in combination with other measures



In some countries, DRS work hand in hand with environmental taxes, which increase or decrease depending on the packaging return rates.

Six respondents indicated that the DRS is combined with another measure, while the other nine did not.

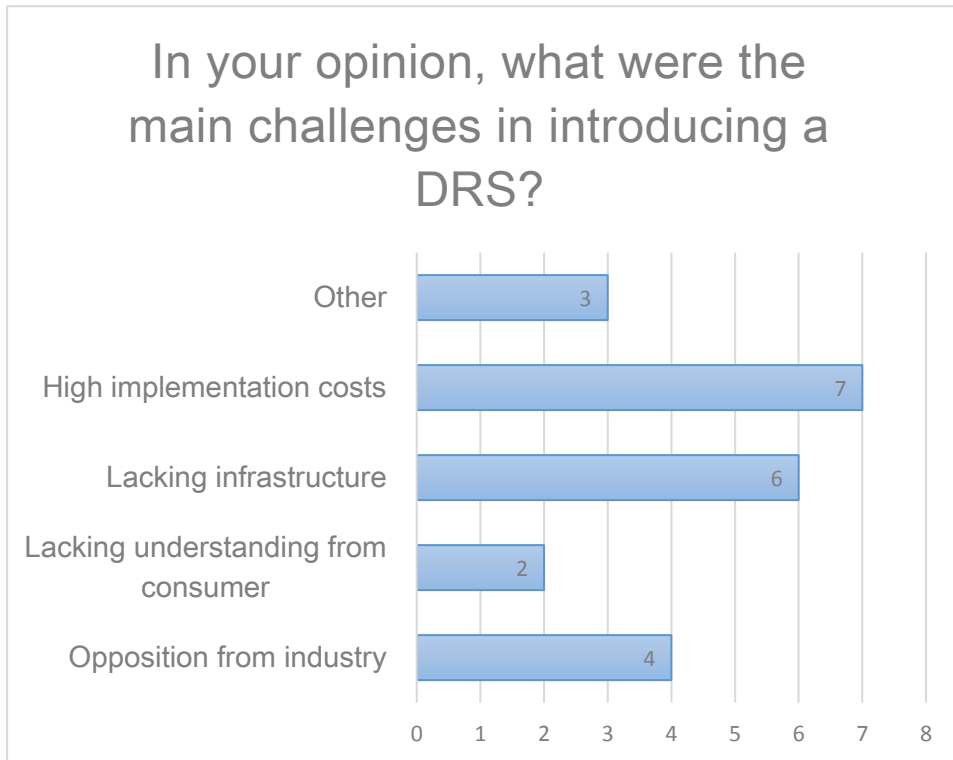
In Finland, there is a beverage packaging tax of 0,51€ per liter for certain alcoholic beverages and soft drinks. However, when becoming a member of an approved and operational system or when a new return system is established, there is an exemption from the tax.

14. Challenges when introducing Deposit Return - Schemes

Introducing DRS means that the industry as well as consumer patterns undergo considerable changes. In addition, an infrastructure to manage the return system has to be set up, which implies substantial investments. Because of these reasons, the introduction of DRS can be met with scepticism.

In order to learn more about the situation in each country, participants were asked about key challenges when the DRS was introduced. Multiple choices were possible for this question.

Most respondents claimed that the high implementation costs constituted the biggest challenge for the introduction of DRS (7), followed by lack of infrastructure (6) and opposition from industry (5). Finland highlighted a specific obstacle concerning cross-border movements: as Finnish and Estonian consumers buy beverages in both countries, imposing deposits only in one country led to difficulties – among them, more shopping in Estonia. The respondent from Norway indicated that administrative burdens complicated the introduction of the DRS. Cyprus raised an additional aspect: the already established Green Dot door-to-door collection system was perceived as competing with the deposit system.



15. Deposit Return - Schemes – future developments

Within the framework of the upcoming EU Plastics Strategy, an expansion of DRS is discussed because of its beneficial effects for the environment. Participants were therefore asked whether they were aware of current plans to introduce DRS prospectively.

The **Netherlands** informed that plans to quit DRS in favor of voluntary collection systems organized by municipalities had been stopped. Also, a deposit for small PET bottles will be introduced – so far, only large plastic bottles had been part of the DRS. Small ones were collected together with other plastic packaging¹⁴. With this new measure, it is expected that four times as many plastic bottles will be collected than is currently the case. In total, the Netherlands hope to expect an increase of recycled PET bottles from currently 60% to then 90%.

The respondent from **Spain** reports that deposit systems are controversially discussed. Currently, the Spanish Ministry of Environment is considering an independent study or pilot project in order to collect more information.

Cyprus reports that there are ongoing discussions on expanding the current DRS.

In **Sweden**, deposits might be used increasingly in the future: the Government has assigned the EPA to investigate if there are any deposit/return schemes that could be used for reducing the environmental impact of plastic waste.

¹⁴ In the Netherlands, municipalities have been obliged since 2010 to collect all the plastic packaging waste from households or to provide for separation.

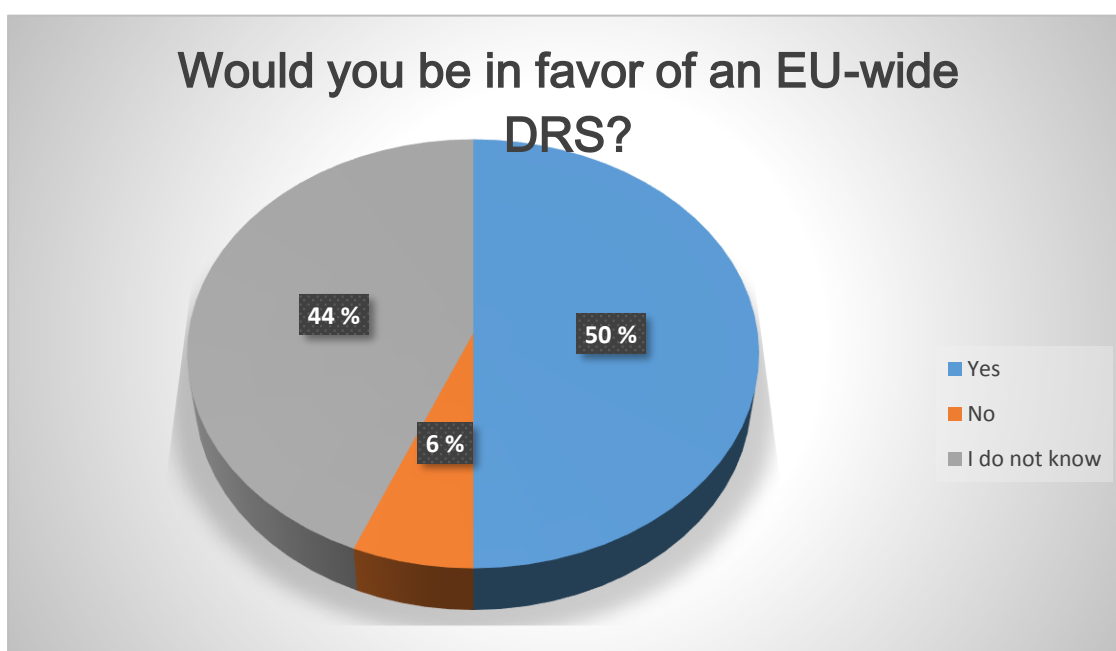
The respondent from **Norway** explains that the current system is under revision.

In **Slovakia**, there is an intention to establish a working group that will review and reconsider single-use of plastic bags from supermarkets, plastic cutlery in restaurants as well as environmental tax allowance.

All other countries report that there are currently no plans to expand the system.

16. Deposit Return - Schemes – a role model for the EU?

Nine out of fifteen respondents claimed that they would be in favor of an EU-wide DRS, one was opposed, and seven were undecided.



17. Results in a Nutshell

- There are mostly DRS for **glass bottles** in place with a variety of exceptions, which do not always seem logical;
- Deposit rates often **vary** for different bottle types;
- **Return rates** are overall high, from 80 – close to 100%;
- There are slightly more **multi-use systems** in place than single-use;
- Some DRS have been established long ago, some are fairly new;
- In most cases, the introduction of DRS was the result of a **regulation**;
- Most DRS are run by the **industry**;
- Overall, return points can mostly be found in **supermarkets**;
- In most cases, DRS operate **nation-wide**;

- The primary effects are **higher recycling rates** and **less littering**;
- In slightly more than half of the cases, DRS are combined with an **environmental tax**;
- The two main aspects hampering the introduction of DRS are **high implementation costs** and **lacking infrastructure**.