

Written evidence submitted by TOMRA

Background

1. TOMRA was founded on an innovation in 1972 that began with the design, manufacturing, and sale of reverse vending machines (RVMs) for automated collection of used beverage containers. Today TOMRA provides technology-led solutions that enable the circular economy with advanced collection and sorting systems that optimize resource recovery and minimize waste in the food, recycling and mining industries.
2. With an installed base of approximately 84,000 systems in over 60 markets, TOMRA is the world's leading provider of reverse vending solutions. Every year TOMRA facilitates the collection of more than 40 billion empty cans and bottles and provides retailers and other customers with an effective and efficient way of collecting, sorting, and processing these containers.

The Committee is inviting written submissions, with a deadline of Friday 5 March, on the below areas. In respect of the scheme to be proposed for England:

- The types of waste to be collected under the scheme
3. Beverage containers
- The materials to be included in the scheme's scope
4. The aim should be to maximize the collection quantity and quality of targeted materials, and subsequently increase the high-quality recycling rates through a broad range of beverage containers. By increasing the quantity collected there will be a substantial reduction in littering of the targeted materials, as well as overall littering. Therefore, it is wise to set up the system as comprehensive as possible from the beginning.
 5. When it comes to the size of targeted materials all commonly consumed at home and on-the-go containers between 0.1l – 3.0l should be included. Based on technical guidelines applied in other deposit markets we would recommend containers have a minimum length of 85mm and minimum cross-sectional diameter of 45mm and a maximum length of 380mm and maximum cross-sectional diameter of 130mm.
 6. The broader the targeted materials in the system:
 - a. the less confusing and more convenient/accessible for the consumer
 - b. the more economic efficiency. More revenue generating incentives for collectors, processors and recyclers, resulting in better economies of scale for capital investment.
 - c. the higher the capture and overall high-quality recycling rate (the target should be food-grade quality used for new bottles and/or food packaging),
 - d. the lesser the risk of containers being littered,
 - e. the lesser the risk of discrimination between materials and contents
 - f. the lesser the risk that producers switch to other “non-deposit” containers as an alternative, based on material and size.

7. It is recommended that each material has its own financial profit and loss account to prevent cross-subsidization between the different material fractions. The system should motivate the producers to use the material that has a low environmental cost attached to collection and high-quality recycling and is easy to recycle.
8. Further in light of the recent announcement by the Scottish Government, it is advised to, as a minimum, include plastic (predominantly PET), metal and glass containers, with regard to any potential future harmonization considerations between Scotland and the other potential systems.
- **Scheme design ('all-in', 'on-the-go' or other models) and the level and scale of deposit charges**
9. While it may be the obvious choice to look at the size, on the go can be larger containers too, as well as smaller containers which are consumed at home. It is therefore very difficult to find a clear definition of what “on-the-go” really is. The only way to determine this is to ask the consumer upon purchase if the container will be consumed at home or on-the-go. It is therefore not possible to actually define what on-the-go is. Particularly beer and wine are often consumed outside of home. For example, during a social gathering in town or parks. Also during a hot summer, as experienced recently, many people carry larger water bottles to stay hydrated. A single can of soft drink is perceived as an on-the-go beverage, whereas a multipack of the same product would probably be consumed at home and is therefore not eligible for deposit? Also, limiting the DRS to the size of the container, let’s say 0.5l, bears the danger that producers simply make changes to the size of the containers. In Germany, for instance, the deposit is on containers b/w 0.1l and 3l. Some producers have therefore chosen to sell containers with a size of 3.001l to avoid the deposit obligation. It is likely that the same will occur with on-the-go containers suddenly carrying a size of 751ml if the deposit is limited to containers 750ml and smaller.
10. There are many reasons why targeting only on-the-go containers is not recommended:
 - a. Very difficult to define what on-the-go really is.
 - b. Confusing for the consumer.
 - c. Limited quantity and quality of targeted materials collected for recycling. Why only focus on a small proportion if one wants to target the whole?
 - d. Makes the overall system more expensive per unit, as the efficiency of the system is driven by volume.
 - e. Less revenue generating incentives for collectors and recyclers resulting in poor economies of scale for capital investment.
 - f. Danger that producers bypass the deposit obligation by changing their container size. Example: DRS is limited to containers up to 750ml. The market will quickly see container sizes of 751ml (see below example Germany).
 - g. The on-the-go approach only solves a proportion of the litter problem and improves the collection rate for a specific, limited set of beverage containers. However, in a framework of a circular economy it is vital that the collected materials are of highest quality where possible while at the same time maximising the potential capture rate. Having the same materials in two different streams (Kerbside & DRS) will negatively compromise their quality (DRS higher quality vs Kerbside lower quality), when the aim should be to maximise the overall quality and quantity collected for recycling.
11. Taking into consideration the recent announcement made by the Scottish Government, the Scottish DRS will be a comprehensive “all-in” system. With regard to any potential future

harmonization considerations between Scotland and the other potential systems, it is advised that the other systems follow a comprehensive “all-in” rather than on-the-go approach.

- **The obligations on retailers at all levels (including online-only retailers) to participate in the scheme**
12. The aim should be to maximize the collection quantity and quality of targeted materials, and subsequently increase the high-quality recycling rates through a broad range of beverage containers.
 13. In order to maximise the collection of the targeted materials it is important to maximise public access to the system.
 14. In order to maximise public access and convenience to return locations, ideally every outlet that sells beverage containers should also be obliged to take these back (in the framework of what is possible / reasonable amount in relation to the store size). It should be as easy to return empty beverage containers, as it is to purchase them.
- **The effect on scheme design of recent changes in patterns of retail activity**
15. There is an increasing trend of online shopping, not only in England, Wales and Northern Ireland. In Germany online shopping is growing and retailers have quickly adapted by offering to backhaul empty containers upon delivery of new ones. One big retailer, Rewe (approx. 3,300 stores in Germany) states the following: “Our driver is happy to take your empty beverage containers. Please understand that for reasons of space on the vehicle we are only able to take back the amount of containers you have ordered. Also, for hygienic reasons we reserve the right to refuse taking back very dirty containers. We would continue to appreciate if you – if possible – can sort out the empty containers prior to pick-up. The deposit value will be deducted from your final shopping invoice”.
 16. In Norway, currently less than 1% of deposit bearing beverages are collected through online shopping logistics. The retailers and subsequently the consumers are thereby provided with a 50l bag for the collection. Upon the new delivery the empty containers are picked up and the deposit accredited to the online account.
 17. Returning empties via online delivery vans is the most efficient and convenient solution. It is especially important that people with mobility issues are able to return their containers to the person who delivers their shopping.
 18. If the online shop only sells online (no physical shop), they should be obliged to take back the empty containers (whoever sells drinks needs to provide a return location).
 19. If the online shop is tied to a retailer (e.g. Tesco), taking back the empty containers through the delivery truck is an additional service to the customer and not a must, since the specific retailer already provides a return location in the shop.
 20. For instance, in Norway, if the drinks containers are packed at the store, the retailer can demand to bring these back to the store. If the drinks containers are packed at the depot, the driver takes them back.

- **The impact of any scheme on existing reuse and recycling and reuse systems**
21. Any potential future DRS for refillable drinks containers, as a basis, needs a DRS for one-way containers. Only through this approach, it is possible to create an appropriate steering mechanism and incentive toward refillables. As refillables mainly come in glass containers, it is vital that that also one-way glass containers carry a deposit otherwise consumer would purchase the product with no deposit on it.
- **The impact of any scheme on local authority kerbside collections and on local authority revenue streams dependent on the value chain of recyclables**
22. In 2017 the European circular economy platform Reloop published a compilation of 27 studies from around the world analysing the economic impacts a DRS has on municipalities. Reloop thereby came to the conclusion that “It is noteworthy that, although different in scope, location, author and year, each study reported significant net cost savings to municipalities”.
23. With regard to England the following analysis have been made:
- a. Have We Got the Bottle? Implementing a Deposit Refund Scheme in the UK (Eunomia Research and Consulting 2010):
 - i. ‘Complementary’ DRS scenario:
 - ii. Reduced recycling collection costs: approx. £129M/year (£1,982 per 1,000
 - iii. Reduced bringsite costs: approx. £3M/year (£46 per 1,000 pop.)
 - iv. Reduced Household Waste Recycling Centers (HWRC) costs: approx. £1M/year (£15 per 1,000 pop.)
 - v. Reduced litter collection costs: approx. £27M/year (£415 per 1,000 pop.)
 - vi. Net savings: approx. £159M/year (£2,443 per 1,000 pop.) (£7/household/year) o
 - ‘Parallel’ DRS scenario:
 - vii. Reduced collection, treatment and disposal costs: approx. £143M/year (£2,198 per 1,000 pop.)
24. Impacts of a Deposit Refund System for One-way Beverage Packaging on Local Authority Waste Services (Eunomia Research and Consulting 2017)
- a. Estimated net annual savings: £35M/year (£1.47/household)
 - b. Impact on collection costs: ‘no change’ to savings of approx. £152,000/year (£1.65/household)
 - c. Impact on sorting costs: approx. £800 to £220,000/year (£0.01 to £3.14/household)
 - d. Lost materials revenue: approx. £58,000 to £160,000/year (£0.67 to £1.63/household)
 - e. Impact on residual waste treatment/disposal costs: estimated savings of £31,000 to £555,000/year (£0.54 to £4.55/household)
 - f. Savings on street cleaning costs: for more urban authorities, approx. £25,000 to £50,000/year (£0.22 to £0.45/household). Rural authorities may see smaller savings.
 - i. Source: <https://reloopplatform.eu/wp-content/uploads/2018/05/Fact-Sheet-Economic-Impacts-to-Municis-9May2018.pdf>

And:

- **How the use of deposit return schemes is likely to affect the UK’s progress towards meeting the targets set in the Resource and Waste Strategy.**

25. DRS is the only scheme reaching today's and future collection and high quantity and quality recycling requirements when it comes to beverage packaging.
26. Looking towards the existing DRSs within Europe the lowest performing system, Estonia, currently (2017) has a collection rate of 82,7% for all beverage containers (plastic/metal/glass) included, whereas the highest performing system, Germany, currently has a collection rate of 96,3% for all beverage containers (plastic/metal/glass) included. Furthermore, when taking into account the collection rates of all 10 existing systems within Europe, the median value amounts to 90,3%.
27. The latest example that can be given is Lithuania. The Lithuanian DRS started operating in 2016. In 2015 the combined collection rate for the targeted beverage container materials (plastic/metal/glass) was 32%. One year after the system was in place the collection rate increased to 74% following a further increase to 92% at the end of 2017.
28. The scope for interoperability between any schemes in England, Wales and Northern Ireland to be established under Schedule 8 to the Environment Bill and the scheme to be established in Scotland under the Deposit and Return Scheme for Scotland Regulations 2020.
29. In light of the announcement by the Scottish Government and taking into account any potential future harmonization considerations between Scotland and the other potential systems it is advised to:
 - a. set the deposit level at the same rate
 - b. include the same material fractions (Plastic, Metal, Glass)
 - c. aim to have the same collection infrastructure obligations
 - d. include the same beverage container size (0.05l – 3l)
 - e. include the same container content
- **The factors which have contributed to the successful implementation of deposit return schemes in other jurisdictions.**
30. Please see TOMRA 12 Key Elements

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