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## FEAD Feedback to the JRC Expert consultation

**FEAD**, the European Waste Management Association, representing the private waste and resource management industry across Europe, **welcomes the objective to improve the performance of waste management systems in the EU, in particular to achieve high quality recycling, which is essential for a circular society.** As stated in the Circular Economy Action Plan, high quality recycling relies notably on *effective separate collection* of waste.

To improve separate collection, the European Commission assigned the JRC to perform an impact assessment to model and quantify the impacts of possible policy options and scenarios aiming at harmonising separate waste collection schemes across Europe. An improvement of the separate collection systems is welcomed by the waste management industry, although it should be carefully assessed if the needed improvements can be achieved by way of harmonisation. In this respect, **FEAD is concerned that harmonisation may not be the most appropriate way to achieve effective separate collection in all cases, considering that local factors are essential in this context, and a cost-benefit approach should be taken into account.** For this reason, it is important that in this process the Joint Research Centre (JRC) also involves the competent authorities and municipalities, focusing on Life Cycle Assessment (LCA) of different systems, in different countries with homogeneous characteristics (inhabitants, distances, social background).

As a matter of fact, the waste management competence is usually in the hands of local authorities. Thus, and according to the principle of subsidiarity, the EU should act only if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States (especially at regional and local levels). It must not be forgotten that competent authorities have the responsibility for waste management, but a harmonised system would tight their hands if no choice is left to them, about the collection system that is most appropriate and efficient.

To improve recycling performance and obtain an optimisation of waste collection, **the combination of positive public support, balanced costs for citizens, and private investments is key driver for the design of waste management policies.** A benchmark should be identified for each possible case that takes into account investments (public and private), recycling rates and emissions produced.

### **1. Pictograms/Bin colours/Distance to collection points**

The education of citizens takes years. Re-educating them and changing their habits would damage the benefit of past efforts, and would require an enormous amount of time, effort, and resources, and could possibly even lead to greater misunderstanding amongst the population. This long-term effect must not be underestimated. Private waste management companies invariably promote new habits, changing the way they work to improve source segregation and selective collection. Therefore, they are very familiar with the challenges of trying to improve citizen behaviour. **If the goal is to improve separate collection systems in the EU, particularly for households, it would be beneficial to avoid confusing the population by changing waste colour codes (e.g. bins, bags, containers) for “harmonisation” purposes.** In addition, the harmonisation of colour codes has no significance nor added value to the environment but will instead generate widespread confusion and substantial costs.

A good option for waste collection can be characterised by **‘the right container/bag for the right waste stream’**. While some waste streams can be collected loose, like paper or glass, many others

require a disposable bag. The proper choice of such a container/bag must take into account its interaction with the sorting and recycling processes in order to avoid additional problems. **EU guidelines** should provide this type of information and develop a useful tool based upon best practices collected by scientific and empirical data, and provide local authorities with the right tools to make the right decisions.

For example, when wastepaper needs to be collected in a bag, the bag should be made out of paper and not out of plastic. In the case of food waste, paper bags are proving to be more compatible with biological treatment process than bioplastic bags, especially when anaerobic processes are involved<sup>1</sup>.

With regards to collection points, the impact of fuel and labour costs should be thoroughly assessed when reviewing distances between collection points. The EU must ensure that the best solution is adopted, and local authorities must consider all collection options for each waste stream (e.g., positioning of collection points, use of electric vehicles, smart technology...).

Waste collection and transport can generate up to 70% of the total costs of an entire system. A critical aspect of the JRC study is the fact that statistical reporting and data collection on the performance, costs, and parameters is not harmonised and remains incomplete across the EU. Data reporting and data collection vary from one city to another, which means reported performances (collection and capture rates) are not comparable. The appropriate methodologies used for estimation and monitoring of waste collection costs are essential if we are to define the most cost-effective waste collection system. EU guidelines should make a tool available to local authorities and municipal solid waste management companies to **benchmark** variance analysis<sup>2</sup>.

## **2. Economic instruments**

Consideration should be given on how to finance the so-called harmonisation. Expanding EPR (Extended Producer Responsibility) schemes has the adverse effect of duplicating financing circuits at the expense of citizens and consumers: the collection of some waste flows is financed from EPR systems, without any decrease of municipal taxes. The costs involved to change the collection infrastructure (bins, containers) and frequencies would be high. Increased traffic from collection vehicles would cause more CO<sub>2</sub> emissions and further increase costs. EPR systems are useful in some situations (household waste flows difficult to collect and with significant amount of tonnages) but should not be expanded to other waste flows as the “regular” system. EPR systems vary considerably from one Member State to another, however harmonisation beyond existing EU legislation is neither very feasible, nor desirable.

A study<sup>3</sup> demonstrates that the performance of EPR schemes for WEEE, waste packaging and waste batteries is strongly influenced by both, the respective socioeconomic context and the national implementation modalities. Although the significant differences in scope, distribution of tasks, definitions, methods, data quality, etc. do not allow a direct comparison of the performance indicators, a range of overarching strengths and weaknesses of the different schemes as well as for EPR schemes in general have been identified:

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<sup>1</sup> <https://journals.sagepub.com/doi/10.1177/0734242X211050181>

<sup>2</sup> <https://journals.sagepub.com/doi/full/10.1177/0734242X16654980>

<sup>3</sup> [https://erp-recycling.org/wp-content/uploads/2021/07/adelphi\\_study\\_Analysis\\_of\\_EPR\\_Schemes\\_July\\_2021.pdf](https://erp-recycling.org/wp-content/uploads/2021/07/adelphi_study_Analysis_of_EPR_Schemes_July_2021.pdf)

## Competitive schemes

- Can create real leverage for innovation and efficiency increases as PROs (Producer Responsibility Organisations) have a strong incentive to improve the services offered to their clients. However, innovations are usually associated with either economic incentives or competitive advantages. Measures that would result in higher contributions for producers are often more difficult to promote as they entail the risk of losing clients to other PROs.
- Tend to result in higher customer satisfaction, where it is usually not the system-level performance of the scheme that is decisive, but rather the availability of options to choose between the best price-quality ratio.
- Can keep costs for waste management operations low as the tendering of waste management activities implemented by multiple PROs leads to prices close to the actual cost for the services provided. This development is also driven by the PROs' strong self-interest in minimising their operating costs in competitive environments in order to not lose customers. An adverse effect can be to drive the market to less quality at lower costs, and not to more innovative solutions and more investment.
- May lead to inefficiencies and higher costs when there is competition for the access to waste as certain actors may intentionally overfulfill their obligations and speculate on selling the excess quantities at a profit to other PROs that can otherwise not meet their collection quotas. The problem is further exacerbated by a systematic "cherry-picking" of particularly high-yield and easy to-reach collection points.

## Monopolistic schemes

- Tend to run more effective information and awareness campaigns. The main reasons for this are that the associated costs can be passed on directly to the producers without fear of them turning to competitors, and the certainty that the respective measures will directly benefit their own business.
- Accumulate significant market power and thus entail the risk of power abuse. Although the abuse of a monopolistic market position can be avoided by appropriate regulation and sufficient transparency, even relatively well-regulated monopolistic systems such as in Belgium and Spain, still show gaps in this regard.

## EPR schemes in general

- Need to address the issue of Batteries included in small WEEE, as there is still a lot of uncertainty on the part of producers as to whether these batteries need to be registered in the respective national EPR systems, which in turn leads to large inaccuracies in the reported figures.
- Must improve the output quality for the recycling of plastic packaging waste, as – despite sufficient technological capacities - the quality of the materials recycled from plastic packaging waste is often insufficient to allow for a closed-material-loop.
- Currently lacks clarity regarding products subject to system participation. This is especially true for batteries and packaging.

- Still show a lack of enforcement that can potentially offset the regulatory frameworks which have noticeably been improved in all analysed case studies and across all waste streams over the last decade. Although the lack of enforcement generally applies to all waste streams considered as part of this study, it is particularly relevant in the case of WEEE collection and recycling, where improper disposal, informal treatment and illegal exports still account for a large share of WEEE available on the market.

**DRS** (Deposit Refund System) can be a good complement only in specific situations (e.g., portable batteries), but they risk competing against door-to-door systems and duplicate investments, especially the currently proposed “return to retail” model. This system generates unnecessary carbon emissions, is inconvenient for consumers, and lacks futureproofing. A **digital DRS solution** could be developed, that enables consumers to reclaim deposits by simply using a smartphone app to scan a Quick Response (QR) Code on a product and another QR code on the recycling bin at their home or place of work, negating the need to return the material to the retail store. A digital DRS performs better and has several advantages:

- Lower carbon impact<sup>4</sup>;
- More convenient for the public, as they use their own recycling bins;
- Could include a wider range of materials (HDPE bottles, steel cans, cartons, ...)
- Lower costs (up to one third of the “return to retail” model)

In any case FEAD suggests not to impose a harmonised DRS digital system, but competent authorities to be invited to conduct a Life Cycle Assessment to evaluate the digital system and its efficiency both for citizens and for professionals.

**Pay-As-You-Throw (PAYT) schemes** are used by local authorities in Belgium, the Netherlands and Luxembourg in an effort to increase recycling and reduce residual waste collected from households. There are numerous different methods of applying PAYT schemes, with the part of the fee related to the choice / behaviour of residents linked either to:

- The size of container chosen by the household;
- The frequency of collection of a given container;
- The application of a fee per bag used;
- The weight of waste set out for collection; or
- A combination of the above

Studies into the various PAYT schemes have found that the schemes have resulted in a **reduction of overall waste generated, and in particular lower rates of residual waste** disposed of<sup>5</sup>. However, not all schemes perform in the same way, and their impact depends also on the scheme that was in place prior to the implementation of PAYT. Schemes based solely on bin capacity do not bring about the same level of benefits as those based on weight or frequency of collection.

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<sup>4</sup> [http://iwma.ie/wp-content/uploads/2021/05/210505-501.181.9\\_SLR-SmartDRS\\_CarbonStudy\\_BriefingNote-for-IWMA\\_Final.pdf](http://iwma.ie/wp-content/uploads/2021/05/210505-501.181.9_SLR-SmartDRS_CarbonStudy_BriefingNote-for-IWMA_Final.pdf)

<sup>5</sup> Dijkgraaf and Gradus, 2003; Hogg, 2002, Hill et al., 2002

The **door-to-door collection** system has shown to increase the participation of users in sorting and collecting solid waste. In particular, the subsequent increase of collected recyclable waste has appeared to reduce its environmental impact.

Citizens practising separate waste collection using a door-to-door system were more aware of the recycling process and more satisfied with the system, as a result of the effectiveness of the information campaigns that have been locally implemented. However, if municipal authorities did not provide appropriate schemes and programmes to facilitate waste collection operations, the correct involvement of citizens in recycling was shown to be very low.

### **3. Separate collection**

The concrete circumstances are also relevant when assessing the possibility of commingled waste streams. In general, separate collection provides the better results. However, consideration should be given to the best environmental outcome in a given local context. In any case, **the separation of dry and wet fractions is crucial, which means that biowaste should always be collected separately.**

### **4. Urbanisation levels**

A harmonised system risks failing to sufficiently address the diverse local factors existing across the EU, such as density, urban structure (towns vs. villages) and size of the population and its development or variability in time or during the year (e.g., touristic regions). Local factors also include geographical factors (e.g., islands or remote areas) and climate conditions. When considering local factors, the integration of the collection system in the whole waste management chain (availability of appropriate sorting and treatment facilities) and the existing market conditions for recycled/recovered materials, in particular for composts, are also a relevant aspect.

A harmonised system is not only hardly suitable to all local specificities (one-size-fits-all approach), but also lacks adaptability or flexibility, which is essential e.g., regarding climate change, emergency situations (health or environment) or in cases of development of rural areas or sparsely populated areas.

In any case, a cost-benefit analysis should be carried out. Benefits to consider are sanitary/health and environmental/circularity. However, the additional recycling/recovery rate per invested euro should also be taken into account. The quality of the collection and the capability of making long term choices are also key. **In general, consideration should be given to the best overall environmental outcome in a given local context.**

## **CONCLUSIONS**

**In general, the focus or goal should not be to force harmonisation but the improvement and optimization of the separate collection systems, where needed, which can be done e.g., sharing best practices (to be adapted to each specific environment) or through the development of guidelines to support competent authorities.** If there are loopholes in the implementation of mandatory obligations, this does not mean that harmonisation is needed, but a need for strengthening the implementation.

- FEAD advocates in this sense, for an obligation of results but not for an obligation of means.
- A one-size-fits-all approach is not appropriate and does not give an added value for the waste management sector, where there is currently not sufficient data available to consider what concrete parameters could be harmonised.
- **The availability of qualitative and comparative data is essential.** On the basis of such data, performance benchmarks can be developed and only once this is achieved, as a basis for assessing the usefulness of harmonisation, combined with accurate impact and life cycle assessment.
- In any case, this study should produce a detailed matrix of waste flows and situations (geography, economics, etc), showing that there is no “one-size fits-all” solution, and help target the only situations where, potentially, there would be added value – if any – in a harmonisation process.
- As an outcome of this study, a recommendation to set up a common EU methodology for benchmarking the separate collection systems would be useful.

**The combination of public support, balanced costs for citizens, private investments, environmental impacts and performances is key driver for the design of waste management policies**

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