

EXTENDED PRODUCER RESPONSIBILITY FOR MANAGEMENT OF PACKAGING WASTE

CONFERENCE

«New Waste Management Policy –
The Path to Circular Economy»

June 2018

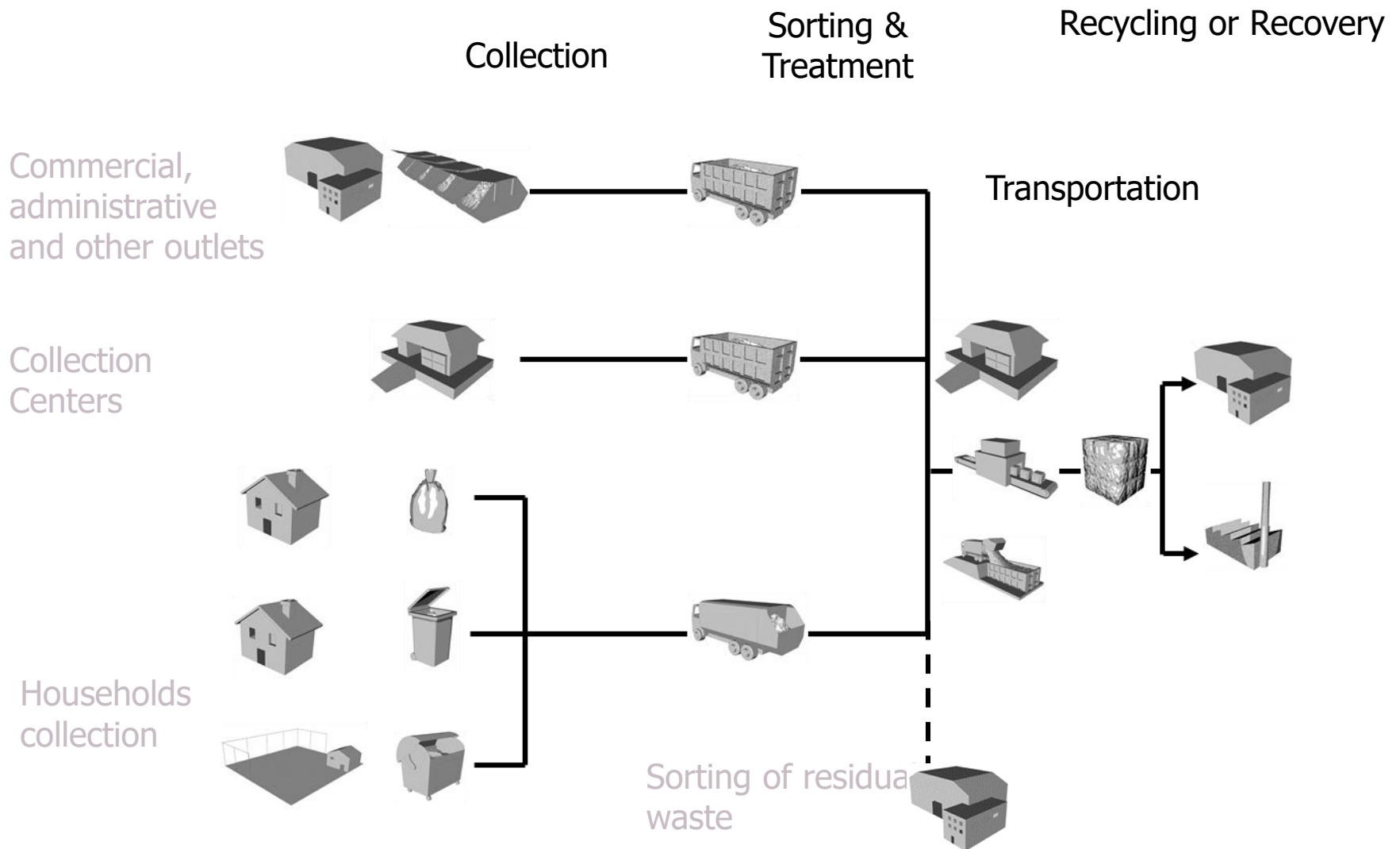
Key issues that need to be addressed

- Setting up clear and measurable objectives towards packaging waste management systems (what need to be achieved and over what period)
- Recycling targets applied and time period for their achievement
- Responsibilities of different stakeholders for the achievement of objectives
- Stricter procedures for the registration Producer Responsibility Organizations (PRO) and for control of operations
- Development of household packaging waste separate collection and sorting systems
- Documentation, reporting and auditing requirements
- All obliged companies contribute financially to the system (reducing free riders)
- Establishment of transparent mechanisms for distribution of tasks and costs between several PRO operating on market (competitiveness issues)
- Increased capacity of the competent authorities

Recovery and Recycling Targets

- General recovery and recycling targets (Directive 2004/12/EC)
 - 60 % as a minimum by weight recovery
 - 55 % as a minimum and 80 % as a maximum by weight recycling
- Material specific recycling targets:
 - 60 % by weight for glass, paper and cardboard
 - 50 % by weight for metals
 - 22,5 % by weight for plastics
 - 15 % by weight for wood
- What must be taken into account
 - The non-declared packaging additionally decreases the targets
 - Commercial packaging is already collected
 - Role of informal sector
- **Recommendation: achievement of EU targets in the period 2025 - 2028**

Packaging waste collection channels



Alternatives for achieving targets

Producers and importers of packed goods have the following alternatives:

- Individually (take back obligation)
 - Providing by themselves the collection of packaging put on the market by establishment of deposit systems or by providing places for return acceptance of packaging waste at the place of sale
- Through collective compliance scheme
 - transferring their responsibility to approved by the competent authorities collective compliance scheme (Producer Responsibility Organization) against payment of fee
- Paying product tax to the State Budget/Environmental Fund should not be considered as an alternative
- Obligatory deposit or take back systems not recommended for implementation due to the high implementation costs, limited coverage of materials, complicated organizational procedures

EPR principles

- Economic stakeholders within the packaging chain (manufacturer, packer/filler, distributor, importer) are responsible for packaging waste management



Foundation of operating organisation

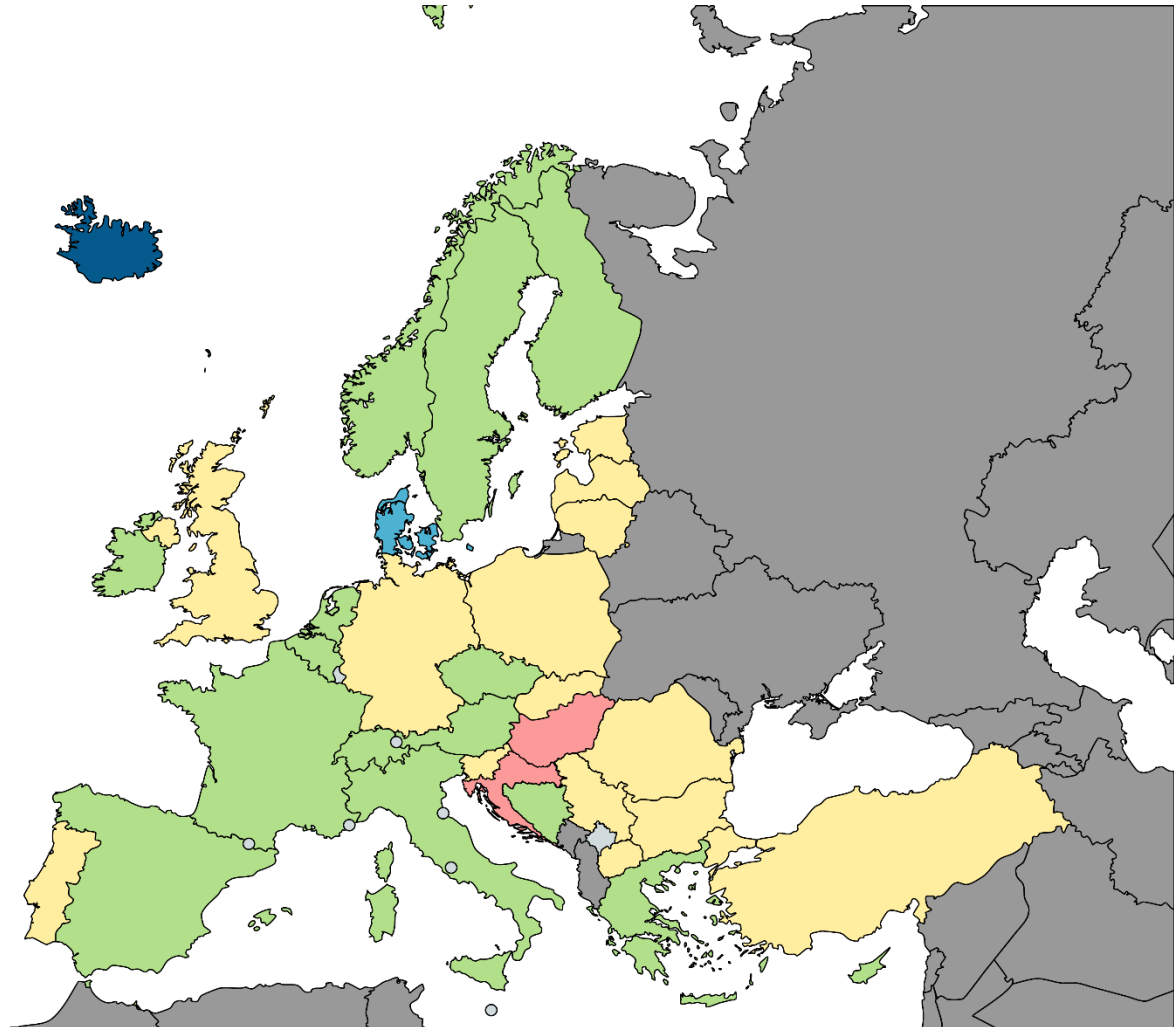


Run by or on behalf of Industry

- Purpose:
 - To guarantee achievement of recycling and recovery targets
 - To provide additional financial stream and incentives for separate collection, sorting (and recycling)
 - To avoid temporary interruptions in the collection processes in case of negative trends in recyclable waste prices
 - To incorporate prevention, reuse and recycling issues into product design

Packaging waste management organizational alternatives

- Single EPR system
- Public Fund
- Packaging tax
- Multiple EPR
- Ministerial system
- No system/unknown



EPR models

- **Dual model** (Austria, Germany, Sweden): Industry has full operational and financial responsibility over collection, sorting and recycling. There is a separate collection system designated to local authorities but their influence is minimal.
- **Shared model** (France, Spain, Belgium, Netherlands, Italy, Czech Republic, Slovenia,): The responsibility is shared between industry and the local authorities based on common agreements regarding collection. Municipalities are responsible for collection, and often for sorting of packaging waste, arising on the municipal level, while industry's financial responsibility differs from country to country.
- **Tradable Credits Model** (UK, partly Poland): There is neither a link between industry and municipalities nor differentiation between commercial and packaging arising at the municipal level.

EPR models

- **PROs in hands of obliged industry** (Belgium, Czech Republic, Ireland, Italy, France, Netherlands, Norway, Portugal, Spain): Obligated industry creates one common non-profit entity that collects the necessary funding, cooperates with local authorities and ensures recycling in the most cost-efficient way.
- **Vertical integrated systems** (Germany, Poland, Slovenia, Romania, Bulgaria): Several, usually profit-oriented entities compete to attract obliged companies
- **Sharing the collection infrastructure** (Germany): Inhabitants have access to a common container and the collected packaging waste is split between the various PROs prior to being sorted. The cost distribution is established by a clearing house.
- **Competing on the infrastructure** (Estonia): Every PRO offers its own container to inhabitants.
- PROs only responsible for packaging arising at the municipal level (Belgium, Germany, France, Spain), for commercial packaging (Belgium), or for integrated packaging waste streams (Netherlands, Italy, Czech Republic).
- **Each PRO in a separate district** (Poland, Romania, Bulgaria, Slovakia, Malta, Latvia, Lithuania): Each PRO signs up with as many municipalities as needed to fulfil targets according to market shares.

Licensing (service) Fees charged by PROs

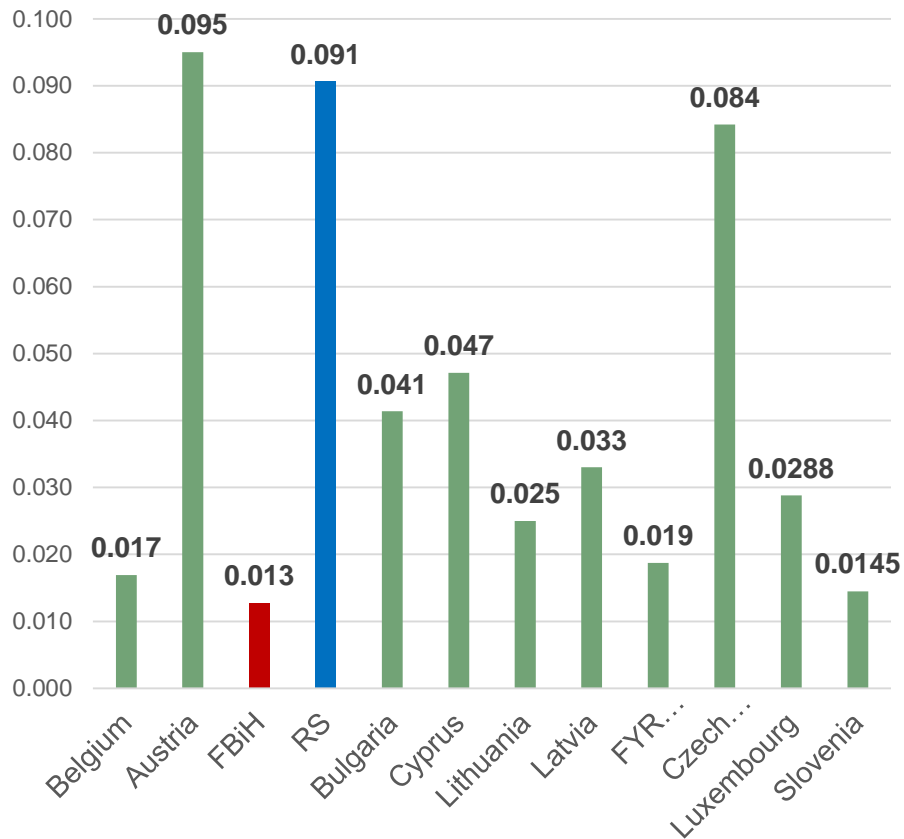
- Major factors influencing relative compliance costs:
 - Existing collection and recovery infrastructure in the waste management sector
 - The source of packaging used to meet national recycling quotas (household only or all packaging).
 - Household packaging waste is more expensive to collect and recover than packaging waste arising at industry's back door.
 - The proportionate share of costs which industry bears. Some schemes meet 100% cost of collection and recovery, while others only pay a share thereof.
 - National recycling quotas and the effect of derogations.
 - Collection system used affect charges. Bring systems are generally less expensive than kerbside collection.
 - Geographic location and population density. Remote and sparsely populated regions will generally be more difficult and expensive to collect from.
 - Enforcement regimes influence costs. The more companies who participate in the scheme, the greater the spread of the cost base.
 - Labour costs and general overheads differ depending on the prevailing local economic conditions.

Licensing (service) Fees charged by PROs

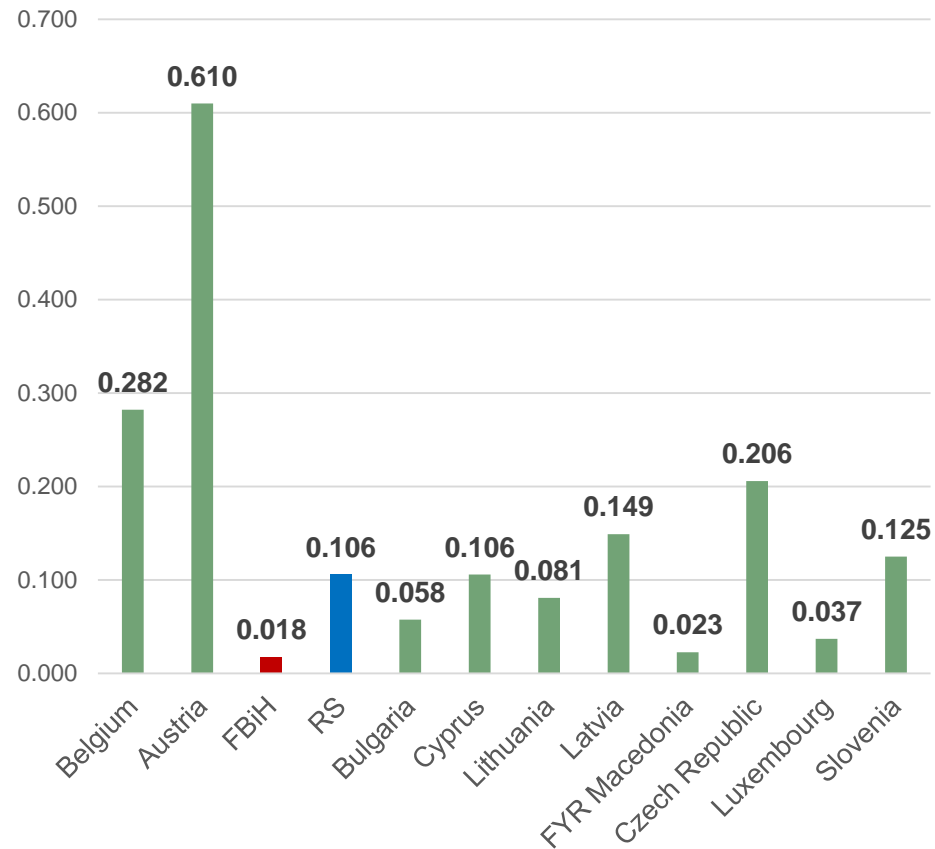
- All of the systems have licensing fees per quantity of material. Different system use different fee per material structure.
- Some systems have different fees for household (sales) packaging and commercial/industrial (group, transport) packaging (e.g. Cyprus Green Dot, EKO-KOM – Czech Republic, ERO – Estonia, Green Pack in Malta)
- Some systems have different fees depending on the packaging size and volume (e.g. ARA in Austria, Gront Punk Norway).
- Some system have additional fees per unit of packaging (e.g. HERRCO in Greece) or minimum fee per packaging unit (e.g. Fost Plus in Belgium).
- Some of the systems charge participation fee as a flat fee per tonne (e.g. Repak in Ireland).
- Some of the companies have set a minimum licensing fee per company (e.g. EcoPack Bulgaria) or standard fee for companies with low packaging amounts and/or joining fee (e.g. REPA in Sweden).
- In limited number of cases discounts from the standard fees are provided for certain categories of clients. For example, Ecopack Bulgaria gives a 10% discount for in-time submission of monthly reports and additional 10% for in time payment.
- Some of the PROs offer additional services for their clients.

Licensing (service) fees comparison

Paper&cardboard packaging (EUR/kg)



Plastic packaging (EUR/kg)



Fund managed scheme (not recommended)

- Fund managed scheme is an alternative of EPR
- State Administration, through the Fund takes the entire responsibility for implementation of packaging waste management system
- The obliged companies report the packaging quantities placed on the market in Ukraine and pay a product tax to the respective Fund
- The revenues collected will be used to develop the necessary separate collection and sorting infrastructure and finance the implementation costs.
- The local authorities will be entirely responsible for the development of household collection scheme for packaging waste

Fund managed scheme

CONS

- Not common practice in EU countries
- Policy driven decisions and not based on clear economic objectives
- How the amount of product tax is calculated?
- Responsibility for the achievement of recycling and recovery targets?
- Possible spending of funds for other purposes
- The state and local authorities are in general not specialized in operating waste management infrastructure and trade with recyclables
- Significantly more expensive than EPR - the system is focused on investments and public expenditures
- Potential for corruption

PROS

- Higher revenue generating potential (if this is the objective)
- One system implemented through the whole entity/country
- No need to deal with competitive schemes

EPR model



Full or shared responsibility. Role of the local authorities

- PRO has full responsibility for the implementation (**recommended**)



- PRO and municipalities have shared responsibility for the implementation



System scope. Household vs non-household packaging

- Limiting the responsibility of PRO to household packaging (**not recommended**)
 - difficult to distinguish between certain household and commercial packaging items.
 - separate reporting of household and commercial packaging
 - how to deal with commercial packaging
- Setting up separate targets for recycling recovery of household packaging (**not recommended**)
- Objectives for separate collection systems implemented by PROs (**recommended**)
 - minimum number of residents served.
 - container type and minimum container volume provided per capita.
 - collection frequency (or volume collected per capita).
 - all separately collected waste to be delivered to a specialized sorting facility

System scope. Territorial coverage

- **Entire national territory** – all settlements where collection of municipal waste is organized
- Setting objectives for **minimum number of residents** served as percentage of total number of residents.
- Setting a threshold limit for the **minimum size of the settlement** where separate collection must be organized
- How to divide responsibilities between several PROs operating on market?
 - Legislation should avoid cherry picking between collection areas and ensure the same quality and accessibility of collection service nationwide, with a homogeneous, coherent system in terms of image and communication.

Competitive vs monopoly market

- Most EU countries did not grant exclusive or special rights to companies operating collective systems.
- Considering that Ukraine is relatively big market operation of several PROs is possible.
- The existence of more than one PROs presumes the establishment of clear rules and procedures for fair distribution of tasks between the market participants:
 - To set up a special entity (clearing house) with the purpose to distribute and verify the implementation of tasks by the different operators, including the allocation of financial responsibilities.
 - The national legislation to precisely define the procedures for distribution of responsibilities between PROs. Usually this is based on dividing service territory proportionally to the market share of PROs.

Choice of appropriate separate collection scheme for households



- collection system (bins or bags, centralised/decentralised, etc.)
- collected components (single or combined multi-material collection)
- container size, container types combined with frequency of emptying
- public relation ensures consumer participation

Setting clear objectives towards future PW management system

- What need to be achieved and over what planning period?
- The typical objectives include:
 - Technical requirements towards the separate collection and sorting system
 - Geographical scope of the separate collection
- The system shall be focused on the achievement of specific results
 - achievement of recycling and recovery targets
 - minimum number of residents provided with separate collection
 - separation of the cost structures of the household and the commercial sector
 - development of additional recycling capacities can become additional priority due to existing market distortions
- The high investment and expenditures level contribute but do not guarantee the efficiency of the system
- Set up of clear indicators and procedures for the measurement of results achieved

Key organizational and financial aspects

- Full organizational and financial responsibility of the PRO for organizing the separate collection and sorting of packaging waste from households
- The initial investments for the purchasing of separate collection containers can be covered directly by PRO
- Collection vehicles and sorting infrastructure can be provided by the companies contracted to perform the respective service.
- PRO can invest in sorting facilities and transfer the assets to specialized company contracted for the service (in special cases)
- In case that PRO intends to operate the separate collection and sorting by itself it shall register a separate company and obtain the necessary permits.