# **Ministerial Draft**

of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

# Regulation on the levy rates and the points system of the single-use plastics fund

(Single-use Plastics Fund Regulation – EWKFondsV)

# A. Problem and objective

The Single-use Plastic Fund Act (EWKFondsG) of xx.xx.2023 (Federal Law Gazette I...) has created the legal basis for the formation and management of a single-use plastics fund by the Federal Environment Agency, for the collection of a single-use plastic levy from the manufacturers of certain single-use plastic products and for the payment of funds to the public-law waste management authorities and other legal entities under public law who are entitled to claim. The single-use plastic levy is to be paid by the manufacturers from 1 January 2024 and is to be paid by the beneficiaries for the first time in 2025 for the year 2024. The funds from the single-use plastics fund are also to be paid out to them for the first time in 2025 on the basis of the benefits provided by the beneficiaries in 2024. Therefore, the levy rates for the single-use plastic levy as well as the point system for the payment of funds from the single-use plastics fund pursuant to § 14(1) and (2) and § 19(2) and (3) of the EWKFondsG by statutory instrument of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection are to be established by 31 December 2023. This is the purpose of this Regulation.

# **B. Solution**

The provisions of this Regulation determine, on the one hand, the necessary levy rates for the single-use plastic levy and, on the other hand, the point system for the payment of the funds in compliance with the legal basis of the EWKFondsG, in particular pursuant to § 14(2) and § 19(3) of the EWKFondsG. The findings of the research project commissioned by the Federal Environment Agency "Developing a cost model for the implementation of Article 8(2) and (3) of the EU Single Use Plastics Directive" (UBA texts 132/2022, published on 30 November 2022, amended on 7 March 2023) will be taken into account. The text is available at https://www.umweltbundesamt.de/publikationen/erarbeitung-eineskostenmodells-fuer-die-umsetzung.

# C. Alternatives

None. The determination of the levy rates for the single-use plastic levy and the point system for the payment of funds from the single-use plastics fund by statutory ordinance of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection is mandatory in accordance with § 14(1) and (2) and § 19(2) and (3) of the EWKFondsG.

# **D.** Budgetary expenditure exclusive of compliance costs

No budgetary expenditure will arise without compliance costs. The total revenue generated by the single-use plastic levy shall be estimated at up to EUR 436 million per year on the basis of the levy rates laid down in this Regulation and the respective market volumes of single-use plastic products. Although the revenue is collected by the Federal Environment Agency and initially recorded in the federal budget, except for the minor fund management costs, it is distributed in full to the eligible public-law waste management authorities and to the other entitled legal entities under public law. Since the vast majority of beneficiaries are attributable to the Länder and municipalities, the revenue is largely allocated to the budgets of the Länder and municipalities.

# E. Compliance costs

# E.1 Compliance costs for citizens

There is no compliance cost for citizens.

# E.2 Compliance costs for businesses

There is no compliance cost for businesses.

# E.3 Compliance costs for the authorities

There is no compliance cost for the authorities.

# F. Further costs

It cannot be ruled out that manufacturers will pass on the additional costs caused by the single-use plastic levy on to consumers. However, such an effect is only likely to increase the individual prices for products slightly. On the other hand, charges and contributions for street cleaning and waste disposal can lower the price for consumers. Measurable effects on consumer price levels are therefore not generally to be expected.

# Ministerial Draft of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

# Regulation on the levy rates and the points system of the singleuse plastics fund

# (Single-use Plastic Fund Regulation – EWKFondsV)<sup>1/2)</sup>

# Dated ...

On the basis of § 14(1) and 19(2) of the Single-use Plastic Fund Act of [...] (Federal Law Gazette I S. [...]), the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection, after consulting the relevant circles and taking into account the Bundestag's decision of xx.xx.2023/respecting the rights of the Bundestag, orders:

#### §1

#### Scope of application

This Regulation lays down the levy rates for the single-use plastic levy and the point system for payments from the single-use plastics fund.

# § 2

#### Levy rates for single-use plastic levy

The single-use plastic levy pursuant to § 12 of the Single-use Plastic Fund Act shall be subject to the following levy rates in euro per 1 kilogram:

- 1. Food containers 0.177,
- 2. Bag and foil packaging 0.876,
- 3. non-depositable beverage containers 0.181,
- 4. depositable beverage containers 0.001,
- 5. Beverage cups 1.236,
- 6. Lightweight plastic carrier bags 3.801,
- 7. Wet wipes 0.061,
- 8. Balloons 4.340,
- 9. Tobacco products with filters and filters for tobacco products 8.972.

<sup>&</sup>lt;sup>1</sup> )This Regulation is intended to implement Articles 8(1) to (7) of Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (OJ L 155, 12.6.2019, p. 1).

<sup>&</sup>lt;sup>2</sup> )Notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17.9.2015, p. 1).

#### Point system of the single-use plastics fund

For the point system pursuant to § 19(1) of the Single-use Plastic Fund Act, the following points shall apply:

- 10. for services in the city:
  - a) Cleaning performance range 10.0 points per 1 kilometre cleaning distance,
  - b) Collection capacity of bin 1.0 points per 100 litres of bin volume,
  - c) Cleaning performance Area 3.0 points per 1000 square metres of cleaning area,
  - d) Cleaning performance of gullies 2.4 points per 1 gully,
  - e) Waste quantity disposal amount 31.5 points per 1 tonne of waste,
  - f) Awareness-raising performance 15.8 points per 1 employee hour and
- 11. for extra-urban services:
  - a) Cleaning performance route 7.3 points per 1 kilometre of cleaning distance,
  - b) Collection capacity of bin 0.7 points per 100 litres of bin volume,
  - c) Cleaning performance Area 2.4 points per 1000 square metres of cleaning area,
  - d) Waste quantity disposal amount 31.5 points per 1 tonne of waste,
  - e) Sensitisation performance 15.8 points per 1 employee hour.

#### § 4

#### Entry into force

This Regulation shall enter into force on 1 January 2024.

# Explanatory notes

# A. General part

# I. Objective of and need for the provisions

This Regulation lays down the levy rates for the single-use plastic levy of a single-use plastic product in accordance with Annex 1 to the Single-use Plastic Fund Act (EWK-FondsG) of xx.xx.2023 (Federal Law Gazette I...) and the point system for the payment of funds from the single-use plastics fund. The obligations under § 14(1) and (2) and § 19(2) and (3) of the EWKFondsG are thus implemented. According to this, the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection has until 31 December 2023 to enact the corresponding regulations by statutory instrument. The German Bundestag shall participate in the adoption of the Regulation, in accordance with § 30 of the EWKFondsG.

The EWKFondsG has established the legal basis for the formation and management of a single-use plastics fund by the Federal Environment Agency, the levying of a single-use plastic levy to be paid by the manufacturers of single-use plastic products and the payment of funds to the public-law waste management authorities and other entitled legal entities under public law. The single-use plastic levy is calculated from the mass of single-use plastic products made available or sold for the first time on the market multiplied by a levy rate applicable to each single-use plastic product (§ 13(1) of the EWKFondsG). The funds from the single-use plastics fund are disbursed according to a point system which assigns a certain score to the services provided by the beneficiaries (§ 21 of the EWK-FondsG).

# II. Main content of the draft

The Regulation regulates the levy rates for the single-use plastics fund from the singleuse plastic levy to be paid to the manufacturers and in § 3 the point system for the payment of funds from the single-use plastics fund to the beneficiaries based on the specifications of the EWKFondsG and taking into account the findings from the research project "Development of a cost model for the implementation of Article 8 § 2 and 3 of the EU Single-Use Plastics Directive" (UBA-Texte 132/2022, published on 30 November 2022, amended on 7 March 2023, available at https://www.umweltbundesamt.de/publikationen/ erereis-eines-kostenmodells-fuer-die-umsetzung) in § 2.

# III. Alternatives

None. The determination of the levy rates for the single-use plastic levy and the point system for the payment of funds from the Single-use Plastic Fund by statutory instrument of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection is mandatory according to  $\S$  14(1) and (2) and  $\S$  19(2) and (3) of the EWKFondsG.

# IV. Regulatory authorisations and substantive requirements

The authorisation to adopt this statutory instrument results from the determination of the levy rates according to clause 1 of § 14(1) of the EWKFondsG and with regard to the determination of the point system under § 19(2), clause 1 of the EWKFondsG. Both regula-

tory powers are addressed to the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection. Pursuant to § 30 EWKFondsG, the German Bundestag is to participate in the adoption of the Regulation.

Pursuant to § 14(2) and 19(3) of the EWKFondsG, the principle of cost efficiency and the transparency requirement must be respected when determining the levy rates and the point system, the cost recovery requirement, the ban on cost overrun. In determining the costs according to Appendix 2, the weight, volume and number of wastes generated from the single-use plastic products may also be taken into account for an appropriate allocation of costs (§ 14(2) clause 2 of the EWKFondsG). These substantive requirements are met by this Regulation.

#### 1. Cost recovery requirement

As regards the cost recovery requirement, the justification of the EWKFondsG (Bundestagdrucksache 20/5164, p. 70) states: The cost recovery requirement arises firstly from the obligation to bear costs laid down in Articles 8(2) and (3) of Directive (EU) 2019/904, but it becomes particularly clear if, in addition, the relevant recital 21 of Directive (EU) 2019/904 is used for interpretation. This states that, Member States should introduce extended manufacturer responsibility schemes to 'cover' the necessary costs of waste management, public cleaning and awareness-raising activities in line with the polluter pays principle for single-use plastic products for which there are currently not readily available suitable and sustainable alternatives. This means that, when establishing the levy rates, the legislator must base this on the full recovery of the total costs for the costs referred to in Annex 2.

The cost model underlying this Regulation took into account all the cost categories listed in Annex 2 EWKFondsG. The cost determination was based on a valid determination of average costs between the individual collection systems. In numerous places, a deeper analysis of individual cost items was carried out in order to map the total costs as accurately as possible. In deriving the levy rates, all determined costs were included in relation to the respective proportion of waste generated from single-use plastic products. No deductions were made from costs to be reimbursed. The levy rates of the single-use plastic levy are therefore geared towards full coverage in relation to the total costs on national territory. The respective levy rate in euro per kilogram therefore accurately reflects the costs incurred by the concrete single-use plastic product. In other words, the ideal situation of fully legal behaviour of all affected manufacturers is also fully covered by the costs set out in Annex 2 EWKFondsG.

The points system, which regulates the distribution of funds, refers to the cost-triggering services provided in each case. It has also been modelled on the validly determined average costs of the individual performance parameters and places the services in a cost-appropriate ratio. This means that it is ensured that the specific allocation of funds is also carried out in accordance with the cost recovery requirement.

#### 2. Ban on cost overruns

As regards the ban on cost overruns, the EWKFondsG (Bundestagdrucksache 20/5164, p. 70) states: The prohibition on exceeding costs is derived from clause 1 of Article 8(4) of Directive (EU) 2019/904. Accordingly, the costs to be borne by producers may 'not exceed' the costs that are necessary to provide the services in a cost-efficient way. The costs incurred for the extended manufacturer responsibility measures referred to in Article 8(2) and (3) of Directive (EU) 2019/904 thus constitute the limit on the cost burden for producers. This limit must not be exceeded with the levying of the single-use plastic levy as a special levy with a financing function. Firstly, this means that the legislator must link the levy rate being established to the costs to be reimbursed in accordance with Annex 2. Further costs may not be taken into account when establishing the levy rate. For this rea-

son, for example, it is not permissible to levy a coordination surcharge. Secondly, within the cost framework set out in Annex 2, costs must not be exceeded in the long term.

In the cost model underlying the Regulation, only the cost categories listed in Annex 2 of EWKFondsG were taken into account. Neither further cost categories nor cost-related steering or safety surcharges were included. The external limits of the ban on cost overruns are therefore respected. The levy rates are designed in such a way that they represent the actual costs per kilogram in relation to the respective single-use plastic product. Should changes occur, this will be sufficiently covered by the permanent verification obligation pursuant to § 14(3) of the EWKFondsG. While it is not expected that these costs will actually fall due to general price developments and inflation, the obligation to review guarantees that there will be no permanent overcovering of costs if this does occur It should also be emphasized that changes in the annual volume of single-use plastic products placed on the market are offset by the fact that the single-use plastic levy is not a fixed amount, but the product of the volume placed on the market and the associated levy rate. Taking into account market volumes ensures that a decrease in single-use plastic products is directly reflected in the total revenue from the levy. This also contributes to the fact that permanent overcovering can be ruled out.

Finally, the ban on cost overruns is also safeguarded by the point system on the part of the beneficiaries. This puts the individual benefits into a reasonable ratio on the basis of average costs. Since the amount to be paid is also dependent on the services actually provided, it is ensured that there is no overrun in the costs to be reimbursed. It is theoretically conceivable, but highly unlikely, that only so few eligible persons can register or submit a data report that the allocation of funds by means of the point system results in the actual costs being exceeded on a case-by-case basis. On the one hand, this case should not occur in practice because the eligible public-law waste management authorities and other entitled legal entities under public law have a high interest in receiving corresponding funds and, secondly, this finding would become clear immediately after the annual point value has been determined, so that appropriate countermeasures, for example further information work on the beneficiaries concerned, can be taken without delay. This means that a permanent overcovering can also be excluded on the disbursement side.

#### 3. Principle of cost efficiency

As regards the principle of cost efficiency, the EWKFondsG (Bundestagdrucksache 20/5164, p. 70) states: The principle of cost efficiency also follows from clause 1 of Article 8(4) of Directive (EU) 2019/904. Accordingly, the costs to be borne must not exceed the costs that are necessary to provide the services referred to in Article 8(2) and (3) of Directive (EU) 2019/904 'in a cost-efficient way'. This is not a feature unique to the cost calculation for single-use plastic products. On the contrary, the principle of cost efficiency of extended manufacturer responsibility as a whole is based on (cf. Article 8a(4)(c) of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3). However, neither of the two Directives defines 'cost efficiency'. Nor are the guidelines to be adopted by the European Commission pursuant to Article 8(4)(5) of Directive (EU) 2019/904 on the costs of public cleaning operations available yet. However, both when imposing fees and imposing special levies with a financing function, the level of the non-tax levy is restricted by the payer's responsibility for financing. This suggests that, in terms of restricting the cost burden to costs that are 'required' or 'necessary' and when interpreting the requirement for 'services to be provided in a cost-efficient way', the principle of necessity from the law governing fees should be applied. This principle concerns not only the adequacy of the costs incurred, which is also referred to as 'cost-related necessity', but also the necessity of the public institution itself that is able to charge fees and the manner in which it operates. The latter is referred to as 'institutional necessity'.

The cost model underlying the levy rates and the point system is based on a comprehensive benchmark approach. That is to say, numerous gueries, evaluations of scientific studies and available statistical data, as well as waste and cost analyses, identified the costs to be borne in accordance with Article 8(2) and (3) of Directive (EU) 2019/904 and divided between the individual single-use plastic products. In particular, the cost determination was carried out in detail in order to obtain an accurate and comprehensive picture in terms of regional differences. The benchmark of cost efficiency was the objective of the extended manufacturer responsibility to be implemented in accordance with Article 8 of Directive (EU) 2019/904 that as far as possible all waste from the single-use plastic products concerned does not enter the environment. During cost determination, it could be assumed, on the one hand, that the principle of economical and sound financial management applicable to the public sector already determines the need for the provision of services. This was all the more so because the benefits in guestion have so far been fully or partially financed by fees and therefore the beneficiaries concerned are particularly obliged by the local tax laws of the Länder to operate efficiently and not to generate inadequate costs. On the other hand, it could be assumed that the application of competition law in the context of tenders would also result in the provision of third-party services in a cost-effective manner. The cost average was therefore calculated in order to calculate costs. For the inner-city area, the average is calculated on the basis of a median and for the extra-urban area by the arithmetic mean. Overall, it was possible to ensure that "outliers" do not distort the result both upwards and downwards in the determined individual values.

#### 4. Transparency requirement

As regards the transparency requirement, the justification of the EWKFondsG (Bundestagdrucksache 20/5164, p. 70) states: Finally, the requirement of transparency also stems from clause 1 of Article 8(4) of Directive (EU) 2019/904. Accordingly, the costs to be borne must be 'established in a transparent way between the actors concerned'. Firstly, it is necessary to transparently and comprehensibly establish which types of cost are to be applied to which single-use plastic products. This is ensured by the definitions in conjunction with Annex 2. Secondly, the cost for each single-use plastic product must also be derived in a transparent way within the framework of the statutory instrument. When drafting the Regulation, it will be necessary to make sure that the respective levy rate is presented comprehensibly for all parties involved in particular when setting out the statement of reasons. Finally, the transparency requirement also includes the beneficiaries, i.e. those providing the services referred to in Article 8(2) and (3) of Directive (EU) 2019/904. Therefore, the transparency requirement must also be taken into account when determining the payment criteria.

The comments on § 2 concerning the derivation of the levy rates and on § 3 regarding the point system of this Regulation ensure compliance with the transparency requirement. In addition, all relevant basic data with detailed explanations on its identification and methodological approach are also included in the final report of the research project "Developing a cost model for the implementation of Article 8(2) and (3) of the EU Single Use Plastics Directive" (UBA texts 132/2022, published on 30 November 2022, as amended on 7 March 2023, available at https://www.umweltbundesamt.de/publikationen/erarbeitung-eines-kostenmodells-fuer-die-umsetzung).

#### V. Compatibility with European Union law and international treaties

Like the EWKFondsG (cf. Bundestagsdrucksache 20/5164, p. 29), this Regulation also transposes the relevant provisions of Article 8(1) to (7) of Directive (EU) 2019/904 first and foremost into German law. In doing so, compliance with the relevant requirements laid down in Articles 8 and 8a of Directive 2008/98/EC for extended manufacturer responsibil-

ity schemes is achieved. The Regulation is compatible with international treaties concluded by the Federal Republic of Germany.

#### VI. Consequences of the Legislation

#### 1. Legal and administrative simplification

The Regulation does not entail any direct legal or administrative simplification. However, it serves to organise the reimbursement of costs from the EWKFondsG, which in turn is designed in such a way that the collection of the levy and the payment of funds is carried out with as little bureaucracy as possible (cf. Bundestag printed matter 20/5164, p. 29). Since the amount of the levy in concrete individual cases depends on the mass of single-use plastic products made available or sold on the market, in addition to the levy rates laid down by this statutory instrument pursuant to clause 2 of § 13(1) of the EWKFondsG, the interests of small and medium-sized enterprises are safeguarded.

#### 2. Sustainability aspects

Like the EWKFondsG, this Regulation also contributes to the achievement of the Sustainable Development Goals (SDGs) as well as the principles of sustainable development as components of the German Sustainability Strategy (update 2018) of the Federal Government (cf. Bundestag paper 20/5164, p. 30).

#### 3. Estimated revenue

The single-use plastic levy will lead to estimated revenues of up to 436 million euro for the federal government, state governments and municipalities. Although the revenues of the single-use plastic levy are initially transferred entirely to the single-use plastics fund, which is managed as an assigned title in the federal budget, the fund's revenues are transferred in full to the eligible public-law waste management authorities and other entitled legal entities under public law after deduction of the minor fund management costs, in accordance with the legal requirements of the EWKFondsG. This also applies to possible reserves. Since the beneficiaries are largely assigned to the Länder and municipalities, the majority of the revenues will also benefit them.

Below is a detailed explanation of the income expected from the single-use plastic levy. Whereas this Regulation establishes legally binding levy rates, the evolution of the quantity on the market can only be estimated. The following mass figures come from the final report of the research project "Developing a cost model for the implementation of Article 8(2) and (3) of the EU Single Use Plastics Directive" (UBA texts 132/2022, published on 30 November 2022, as amended on 7 March 2023, available at https://www.umwelt-bundesamt.de/publikationen/erarbeitung-eines-kostenmodells-fuer-die-umsetzung) and represent the current state of play. Medium-term development is difficult to assess. In this respect, it cannot be ruled out that the mass of single-use plastic products placed on the market will decrease if alternative products and forms of distribution are developed.

Single-use plastic product	Estimated mass	Levy rate in euro per	Estimated revenue in
	in tonnes	kilogram	euro (rounded)
Food containers	296 000	0.177	52 500 000
Bags and foil packaging	75 000	0.876	65 700 000
Non-depositable beverage containers	251 000	0.181	45 500 000
Depositable beverage containers	387 000	0.001	387 000
Beverage cups	59 000	1.236	73 000 000
Lightweight plastic carrier bags	7 000	3.801	26 600 000
Wet wipes	106 000	0.061	6 400 000
Balloons	1 000	4.340	4 300 000
Tobacco filters (products)	18 000	8.972	161 500 000
Total			436 000 000

### 4. Compliance costs

The Regulation does not create any additional compliance cost. This has already been presented in full within the framework of the EWKFondsG (see Bundestag document 20/5164, p. 35 et seq.). The one-off conversion and annual compliance costs for businesses listed therein includes costs arising from the requirements for the manufacturer's obligation to register pursuant to § 7(1) of the EWKFondsG, the assignment and designation of authorised agents pursuant to § 10(1) of the EWKFondsG, the annual reports pursuant to § 11(1) of the EWKFondsG, the order for payment of the single-use plastic levy pursuant to § 12 of the EWKFondsG, the appointment of the members of the Single-use Plastic Commission in accordance with the procedure described in § 24 of the EWKFondsG and the advisory work of the Single-use Plastic Commission pursuant to § 23 of the EWKFondsG.

#### 5. Further costs

The single-use plastic levy shall be included under "further costs". Although the obligation to pay that levy already arises from § 12 of the EWKFondsG, it is only from § 2 of that regulation that the levy rates are determined on the basis of which the total costs can be estimated. In accordance with the clause 2 of § 13(1) of the EWKFondsG, the levy is calculated from the mass made available or sold by the manufacturers on the market to single-use plastic products in accordance with Appendix 2 multiplied by the corresponding levy rate. The total cost for businesses due to the single-use plastic levy is therefore estimated at up to 436 million euro (for calculation, see the explanations presented under 3.).

# 6. Further consequences of the legislation

The further regulatory consequences were examined on the basis of the relevant working aids and guides. It is not apparent beyond the consequences already set out in the framework of the EWKFondsG (cf. Bundestagsdrucksache 20/5164, p. 51).

# VII. Time limit; Evaluation

A time limit of this Regulation shall not be considered as the rules to be transposed in Articles 8(2) and (3) of Directive (EU) 2019/904 apply permanently. However, pursuant to § 14(3) and § 19(4) of the EWKFondsG, a statutory obligation to review applies already. Accordingly, the levy rates set out in this Regulation and the point system shall be reviewed regularly, at least every three years, and, where necessary, adjusted. Since this Regulation shall apply from 1 January 2024, its rules shall be reviewed and where appropriate adjusted by the legislator by 31 December 2026 at the latest. There is therefore no need for further evaluation arrangements in this Regulation.

# **B. Specific part**

# § 1 (Scope of application)

The provision contains the scope of the application, as is customary for laws and regulations. This regulates the determination of the levy rates for the single-use plastic levy and the point system for payment of funds from the single-use plastics fund in the implementation of the statutory mandate from § 14(2) of the EWKFondsG and § 19(3) of the EWK-FondsG The common rules of both subject matters in a statutory instrument are appropriate and correspond to the explanatory memorandum to the EWKFondsG (cf. Bundestag document 20/5164). p. 75).

# Re § 2 (Levy rates)

Pursuant to § 12 of the EWKFondsG, the manufacturers of single-use plastic products in accordance with Annex 1 are to pay an annual special levy to reimburse the costs set out in Annex 2. The single-use plastic levy is thus used to reimburse the collection costs listed in Annex 2 (§ 3(12) of the EWKFondsG), cleaning costs (§ 3(13) EWKFondsG), awareness-raising costs (§ 3 point 14 EWKFondsG), data collection and transmission costs (§ 3 No 15 EWKFondsG) of the beneficiaries as well as the management costs (§ 3 point 16 of the EWKFondsG) of the Federal Environment Agency. The single-use plastic levy is calculated according to § 13(1) clause 2 of the EWKFondsG from the mass of single-use plastic products made available or sold for the first time on the market multiplied by a levy rate fixed for each single-use plastic product in accordance with Appendix 1 of EWK-FondsG. This provision lays down the levy rates for the single-use plastic levy in accordance with the requirements of § 14(1) clause 1 and § 2 of the EWKFondsG. The following approach was taken to derive the levy rates:

#### 1. Step: Determination of the waste composition

As a first step, the individual collection systems for waste in public spaces (bins, litter, Street Sweeps and gullies) were analysed, both for the inner-city and extra-urban areas. The bin collection system represents the collection in a public collection system, while the collection systems for litter, Street Sweeps and gullies represent the cleaning performance in public spaces.

The following table shows the total mass of waste in each collection system, in kilograms per person per year. Background for the inclusion of the population (as of 2021: 83.2 million) is that in one of the next steps, the costs for each of the collection systems have also been determined per inhabitant. The results are from the above under VII. Follow-up research projects of the UBA (see Table 76 of the final report for the inner-city area and Table 19 of the final report for the extra-urban Area).

Area	Collection system:	Mass waste total (in kilograms per person per year)				
	Street bin	1.54				
Inner-city	Green space bin	0.79				
	Street litter	1.75				
	Green space litter	0.43				
	Street sweeps	8.58				
	Gullies	1.03				
Extra-ur-	Litter	0.23				
ban	Bin	0.49				

The distribution of waste in the collection systems was also analysed by mass and volume. It differentiated between the individual single-use plastic products and identified the "Other" section for waste that does not come from single-use plastic products. The number of units was examined only in the collection systems for which it is relevant for the subsequent cost allocation. These include the collection systems "Inner-city Street Litter", "Inner-city Green Space Litter" and "Extra-urban Litter A". For these cases, the determined cleaning costs were allocated at 1/3 according to the number of pieces of the respective waste composition. The integration of quantities into the distribution system is indispensable, as this has a significant influence on the cost during manual cleaning. A cost distribution by weight only would not reflect the cost-contributing manual cost appropriately. The following table shows the percentage breakdown into mass, volume and number of units. Although the quantity analysis has in some cases been limited to one kilogram of waste per analysed waste for capacity reasons, this does not have a negative impact on the representativeness of the analysis, since the sample itself was taken representatively in accordance with the relevant scientific methods.

The differentiated consideration is necessary for the subsequent breakdown of costs between the individual single-use plastic products. The results come from the above-mentioned research project of the UBA (see Tables 68 to 73 for the inner-city area and tables 45 and 47 of the final report for the extra-urban area).

Splitting of single-use plastics per collection system in percentage points												
Collec t	em:	Unity	Food contain- ers	Bags and foil packag- ing	Beverage contain- ers (de- positable)	Beverage contain- ers (non-de- positable)	Bev- erage cups	Light- weight plastic carrier bags	Wet wipes	Bal- loons	Tobacco filters (products)	Other
	РК	Weight %	1.59	1.11	0.02	2.22	3.46	0.60	0.44	0.00	1.52	89.00
	streets	Volume %	7.62	5.64	0.04	5.31	11.48	2.69	0.56	0.02	1.01	65.60
	РК	Weight %	1.67	1.06	0.02	2.56	2.58	0.63	0.45	0.00	1.17	89.90
	Green spaces	Volume %	8.57	5.74	0.05	6.55	9.30	3.04	0.61	0.01	0.84	65.30
		Weight %	1.12	1.22	0.01	1.55	1.93	0.67	0.37	0.06	1.73	91.30
	Street litter	Volume %	5.69	6.54	0.03	3.92	6.77	3.00	0.50	0.27	1.23	72.10
Inner-		Number of pieces %	0.89	3.69	0.01	0.95	1.84	1.34	0.75	0.76	44.05	45.70
city	Green space litter	Weight %	1.08	0.97	0.01	1.77	1.41	0.51	0.35	0.10	0.83	93.00
		Volume %	5.78	5.52	0.04	4.73	5.34	2.65	0.50	0.52	0.62	74.30
		Number of pieces %	1.23	4.23	0.01	1.55	1.92	1.45	1.02	2.01	30.31	56.30
	Street	Weight %	0.11	0.79	0.00	0.27	0.36	0.13	0.06	0.00	1.11	97.20
	sweeps	Volume %	0.64	4.90	0.01	0.82	1.54	0.83	0.10	0.00	0.94	90.20
	Culling	Weight %	0.03	0.69	0.00	0.16	0.07	0.01	0.03	0.00	0.94	98.10
	Guines	Volume %	0.26	5.88	0.01	0.65	0.42	0.12	0.07	0.00	1.06	91.50
		Weight %	1.95	4.20	0.09	4.52	3.68	0.96	1.10	0.02	0.04	83.40
	Litter	Volume %	7.78	16.71	0.17	8.77	9.31	4.38	1.13	0.10	0.03	51.60
Extra- urban		Number of pieces %	2.82	23.18	0.10	5.04	6.08	3.61	4.04	0.56	2.07	52.50
	Bin	Weight %	4.59	3.93	0.08	3.90	4.90	1.39	0.77	0.09	0.37	80.00
		Volume %	15.47	14.06	0.13	6.58	10.61	3.45	0.70	0.28	0.35	48.40

#### 2. Step: Determination of costs

In a second step, the costs for each of the above-mentioned collection systems in the inner-city and extra-urban areas were determined in euro per person per year. Due to the specificities of the two areas and the respective collection systems in the inner-city and extra-urban areas, the results were presented in such a way that a uniform cost rate could be reported later.

#### Sub-step 1: Inner-city cost determination

In the inner-city area, due to the very good data situation, it was possible to differentiate precisely between the individual cost components. In addition to the collection-specific costs, the costs to be reimbursed by the collection system (treatment and disposal costs, overhead costs and awareness-raising costs) were determined separately. The treatment

and disposal costs relate to the disposal of waste collected from the collection in public collection systems and during public cleaning operations. Overhead costs are those costs that are incurred across the collection system, such as costs for information technology or other common infrastructure. The awareness-raising costs are also shown independently and therefore also separately from the collection system.

In addition, the collection systems "Street Bins" and "Green Space Bins" in the inner-city area and "Bins" in the extra-urban area had to take into account a specificity of the concept of collection costs, which is also reflected in the distribution of costs. According to this, the collection costs to be reimbursed include "the cost of setting up specific infrastructure for the collection of waste from tobacco products with plastic filters and filters sold for use in combination with tobacco products in generally accessible places with heavy litter". In this context, specific infrastructure refers to ashtrays placed on or by public bins. For this reason, the costs incurred by additional ashtrays attached to bins must be reported separately for the aforementioned collection systems. Here, only the additional procurement costs of bins with ashtrays were included in the consideration, but not the additional costs resulting from the additional logistical expenditure for the emptying of the ashtrays. These costs could not be quantified due to the very minor additional costs. With a share of about 40 percent of these bins with ashtrays in the federal territory and procurement additional costs of about 20 percent per bin with ash, an average of 8 percent additional costs result in the procurement of paper baskets with ash. Benchmarking projects also show that costs per emptying are composed of approximately 85 percent of logistical costs and about 15 percent of procurement/maintenance costs. If the determined 8 percent of additional procurement costs are associated with the 15 percent share of procurement/maintenance costs, the additional installation of ashtrays results in an additional factor of 1.2 percent which arises when collecting tobacco products with filters (TPF). In the cost model, this surcharge factor is assigned exclusively to tobacco products with filters and filters for tobacco products. The following table shows the determined costs in the inner-city area. The results come from the above-mentioned research project of the UBA (see Table 75 and Figures 34 and 36 of the final report).

Inner-city costs in euro per person per year)					
Specific per collection system	Street bin	2.70 (including 0.032 for TPF)			
	Green space bin	1.48 (of which 0.018 excluding TPF)			
	Street litter	9.21			
	Green space litter	2.08			
	Street sweeps	8.64			
	Gullies	1.27			
	Treatment and disposal costs	1.28			
together	Overhead costs	2.74			
	Awareness-raising costs	0.26			
Total costs (ir	nner-city)	29.67			

#### Sub-step 2: Extra-urban cost determination

In the extra-urban area, in contrast to the inner-city area, there was no separate determination of the collection system-independent costs by querying. In order to achieve a separate identification of treatment and disposal costs, overhead costs and awareness-raising costs, these were calculated on the basis of the percentage distribution in the inner-city area (specific collection/cleaning costs 86 percent, treatment disposal costs 4 percent, overhead costs 9 percent and awareness-raising costs 1 percent).

The following table shows the determined costs in the extra-urban area. The results come from the above-mentioned research project of the UBA (see Figure 32 of the final report).

Extra-urban costs in euro per person per year						
Collection system:	Specific costs	Treatment and disposal costs	Overhead costs	Awareness-raising costs		
Litter	0.087	0.004	0.009	0.001		
Bin	0.180	0.009	0.019	0.002		
Total costs (extra-urban)	0.311					

#### Sub-step 3: Determination of data collection and fund management costs

In addition to the costs referred to in Parts 1 and 2, the data collection costs also independent of the collection system pursuant to § 3(15) of the EWKFondsG as well as the share of the management costs pursuant to § 3(16) of the EWKFondsG were to be refinanced from the fund ('the following: Fund management costs). The detailed explanations on the obligation to reimburse the fund management costs can be found in the explanatory memorandum to the EWKFondsG (Bundestagdrucksache 20/5164, p. 58). For the data collection costs, the calculations already presented in the context of the EWKFondsG, justification of the EERFFG were used. Hereafter come the data collection costs, in particular the costs incurred by the beneficiary as a result of the annual reporting of the services rendered. These are estimated at around 1.3 million euro per year (Bundestagdrucksache 20/5164, p. 49).

The fund management costs are estimated at EUR 4.9 million. The need for an update compared to the estimate of approximately 3.3 million euro from the draft government of the EWKFondsG (Bundestagdrucksache 20/5164, p. 31) arises on the one hand from the results of the IT services commissioned by the Federal Environment Agency in the mean-time and, on the other hand, by the amendments to the draft government for the EWK-FondsG adopted by the German Bundestag (cf. decision of the Environment Committee, BT-Drs. 20/5829). In addition to the generally increased costs for programming services and hosting, the design of as user-friendly registration and reporting processes as possible, the fulfilment of the IT security requirement with regard to electronic processing, payment transactions and the involvement of authorised representatives in the registration process were key factors.

These costs were determined by the population (as of 2021: 83.2 Millions) in order to be able to divide them into the collection systems in the next sub-step with the other costs. The following table shows the data collection and fund management costs.

Costs in euro per person per year				
Data collection costs	0.016			
Fund management costs	0.059			

#### Step 4: Allocation of costs between the collection systems

In a final step, the collection system-independent costs referred to in Part 1 and the data collection and management costs determined in Part 3 shall be transferred to the collection systems. The transfer takes place exclusively on the basis of the mass distribution. In the case of treatment and disposal costs, overhead costs and awareness-raising costs, the distribution was made on the basis of the total mass of the collection systems as these costs relate to all the waste covered. On the other hand, the distribution of data collection and fund management costs was made on the basis of the mass of waste from single-use plastic products, because these costs arise solely from the implementation of the EWK-FondsG. The following table shows the composition of the costs for each collection system in the inner-city and extra-urban areas (see Figures 31 and 32 of the final report/minor deviations due to increased fund management costs):

Total costs in euro per person per year								
Collection sys- tem:		Collection and clean- ing costs	Treatment and dis- posal costs	Overhead costs	Awareness- raising costs	Data collec- tion costs	Fund man- agement costs	
	PK streets	2.70	0.14	0.30	0.03	0.002	0.006	
Inner- city	PK Green spaces	1.48	0.07	0.15	0.01	0.001	0.003	
	Street litter	9.21	0.16	0.34	0.03	0.002	0.007	
	Green space litter	2.08	0.04	0.08	0.01	0.000*	0.002	
	Street sweeps	8.64	0.78	1.67	0.16	0.009	0.034	
	Gullies	1.27	0.09	0.20	0.02	0.001	0.004	
Extra-	Litter	0.087	0.004	0.009	0.001	0.0002	0.0009	
urban	Bin	0.180	0.009	0.019	0.002	0.0005	0.0020	

\* The value is found by rounding after the third decimal.

# <u>3. Step: Distribution of the costs of the collection systems between single-use plastic products</u>

In a third step, the costs determined in the second step for the individual collection systems were allocated to the individual types of single-use plastic products with the help of the waste compositions determined in the first step.

# Sub-step 1: Determination of distribution factors

In order to be able to distribute the costs to the single-use plastic products, a real and cost-appropriate distribution factor (mass, volume, number of units) was determined in a first step for each collection system. The following table presents the distribution factors that are subsequently substantiated in detail (see Table 22 of the final report):

Area	Collection system: Distribution factors					
Inner-city	Street bin	80 % Volume, 20 % mass				
	Green space bin	80 % Volume, 20 % mass				
	Street litter	33.3 % mass, volume, quantity				
	Green space litter	33.3 % mass, volume, quantity				
	Street sweeps	100 % Mass:				
	Gullies	100 % Mass:				
Extra-ur-	Litter	33.3 % mass, volume, quantity				
ban	Bin	80 % Volume, 20 % mass				

For the collection systems <u>Street Sweeps</u> (machine street cleaning) and <u>gully cleaning</u> weight percentages were calculated only because the costs for these collection systems are based exclusively on the weight of the waste collected therein. Corresponding vehicles are regularly equipped with suction and pressing devices, so that the volume does not matter.

In the distribution of costs within the framework of the <u>bin emptying in the inner-city and</u> <u>extra-urban areas</u>, the volume is also taken into account. Since the volume of waste is usually the decisive factor in both the collection and transport operations in the bin, 80 percent of the costs are distributed on the basis of the volume for bin-emptying on inner-city streets and on green spaces as well as in the extra-urban area. The 80/20 distribution results from the fact that about 20 percent of vehicles with a pressing device are used for bin-emptying. Since the pressing devices compact the bin, only the weight and not the volume is the cost-relevant factor in these cases.

The costs of <u>litter cleaning in the inner-city as well as in the extra-urban area</u> were transferred to one third over mass, volume and number of units. Since it was not possible to determine the cost allocation criteria using purely scientific and measurement methods, such as multi-moment recordings, a method had to be chosen which is based on the practice and reflects the resulting expenditure on individual scientific data and qualified estimates as close to reality as possible:

First, in manual cleaning, a distinction must be made between a cleaning process and a transportation process. From research, it is known that about 70 percent of the total cost of cleaning and about 30 percent of the total cost of transportation. The transportation in turn is 50 percent influenced by weight and volume, as both sizes can be the limiting factor for the collected waste. The number of units is not relevant in this context. In the cleaning process, however, the number of pieces represents the decisive cost factor and thus the cost intensity, as the different cleaning equipment must be managed and used in a targeted manner due to the presence of individual pieces of waste, in order to return the waste together and then absorb it, for instance, The weight and volume of the waste only affects the cost in extreme cases (e.g. heavy stones, metals, large-volume cardboard or plastic boxes).

However, it must be taken into account that various manual cleaning systems are used in practice in the context of cleaning performance Litter collection can be carried out, for example, in the form of broom cleaning, pliers cleaning or the use of suction and blowing devices. In addition, it should be noted that manual cleaning is carried out rather selectively (number of pieces fully relevant) or in relation to larger interconnected surfaces. Therefore, even if the number of pieces is basically the decisive cost factor for the cleaning performance, it can also be stated that the number of pieces as the sole decisive factor is slightly less relevant for surface cleaning, since the waste is increasingly processed and collected together. On the basis of these costs determined in practice, a distribution scale of 50 percent for the number of units and 25 per cent for mass and volume are used for the cleaning processes via a qualified estimate. This means a breakdown of 32.5 percent by mass and volume as well as 35 percent on the number of units. In order not to make the calculation unnecessarily complicated, the cost model assumed a breakdown of costs of one third by mass, volume and number of units.

#### Sub-step 2: Consideration of specificities in individual cost categories

As already mentioned above, the specific costs of the ashtrays attached to bins must be taken out of the distribution of the costs of bin emptying and are to be charged exclusively to manufacturers of tobacco filter products. This was taken into account in the cost model when distributing the costs of bin emptying in inner-city areas with an additional factor of 1.2 percent for tobacco filter products.

In addition, as regards awareness-raising costs, it should be borne in mind that manufacturers of packaging subject to system participation are already participating in awarenessraising activities of the dual systems pursuant to § 14(3) of the Packaging Act of 5 July 2017 (Federal Law Gazette I p. 2234), last amended by Article 2 of the Act of 22 September 2021 (Federal Law Gazette I p. 4363). For the above-mentioned public relations work, an amount of EUR 800 000 per year in relation to single-use plastic packaging was set, taking into account the current initiative on the waste separation of the dual systems. This led to deductions according to the weights in the collection systems for food containers, bags and foil packaging, non-depositable beverage containers, beverage cups and lightweight plastic carrier bags. It was simplified to assume that all of these products are packaging subject to system participation.

#### Sub-step 3: Calculation of the individual costs for each single-use plastic product

In this sub-step, the determined costs for each collection system per Person per Year were calculated using the first sub-step and taking into account the distribution key determined in the second sub-step presented specialities in the distribution of costs divided between the individual single-use plastic products. The table below shows the costs per inhabitant per year incurred by each collection system for each single-use plastic product (see Table 24 of the final report/minor deviations due to increased fund management costs).

Costs in euro per	Inner-city							Extra-urban	
person per year di- vided by single-use plastic products	Street bin	Green space bin	Street litter	Green space litter	Street sweep s	Gullie s	Litter	Bin	Total
Single-use plastic products (total)	0.866	0.473	2.843	0.542	0.356	0.035	0.036	0.088	5.238
Food containers	0.179	0.110	0.243	0.058	0.011	0.000*	0.004	0.026	0.631
Bags & foil Packaging	0.132	0.073	0.359	0.076	0.100	0.013	0.014	0.023	0.790
Non-depositable beverage containers	0.137	0.091	0.206	0.059	0.032	0.003	0.006	0.012	0.547
Depositable beverage containers	0.001	0.001	0.002	0.000	0.000*	0.000*	0.000*	0.000*	0.005
Beverage cups	0.282	0.124	0.336	0.062	0.046	0.001	0.006	0.019	0.876
Lightweight plastic carrier bags	0.064	0.039	0.158	0.033	0.017	0.000*	0.003	0.006	0.320
Wet wipes	0.000*	0.000*	0.052	0.014	0.008	0.001	0.002	0.000*	0.077
Balloons	0.000*	0.000*	0.033	0.018	0.000*	0.000*	0.000*	0.000*	0.052
Tobacco filters (products)	0.070	0.034	1.454	0.222	0.142	0.017	0.001	0.001	1.941
Non-single-use plastic products	2.308	1.256	6.905	1.674	10.928	1.549	0.066	0.125	24.811
Total	3.173	1.729	9.748	2.216	11.284	1.584	0.102	0.212	30.049

\* The value is found by rounding after the third decimal.

#### 4. Step: Calculation of the levy rate in kilograms

In a final step, the masses of the affected single-use plastic products provided or sold annually on the market were determined and converted into kilograms per person per year. Subsequently, the costs in euro per person per year were divided by the market volume in kilograms per person per year in order to obtain the product-specific levy rate in euro per Kilogram. The following table shows the above calculation of the levy rates (see Tables 1 and 25 of the final report/minor deviations due to increased fund management costs):

	Market volume	Market volume	Costs	Levy rate
Calculation of the levy rate for each single-use plastic product	(Kgs per year)	(Kgs per person per year)	(Euro per per- son per year)	(Euro per kilo- gram)
	(rounded)	(rounded)	(rounded)	
Food containers	296 000 000	3.558	0.631	0.177
Bags and foil packaging	75 000 000	0.901	0.790	0.876
Non-depositable beverage containers	251 000 000	3.017	0.547	0.181
Depositable beverage containers	387 000 000	4.561	0.005	0.001
Beverage cups	59 000 000	0.709	0.876	1.236
Lightweight plastic carrier bags	7 000 000	0.084	0.320	3.801
Wet wipes	106 000 000	1.274	0.077	0.061
Balloons	1 000 000	0.012	0.052	4.340
Tobacco filters (products)	18 000 000	0.216	1.941	8.972

#### Re § 3 (Point system):

The provision lays down the point system for the payment of funds from the single-use plastics fund pursuant to § 19(1) of the EWKFondsG. The following steps were taken to derive the point system:

As a first step, the relevant categories of benefits were identified on the basis of the requirements of the EWKFondsG for which points are to be awarded in the context of the payment of funds. Just as in the context of the determination of the levy rates, it was differentiated according to inner-city and extra-urban areas and according to the different collection systems. For each benefit category, a unit was then defined in which the benefit provided must be indicated by the beneficiaries. Care was taken to ensure that the performance parameters and the associated units are as simple as possible for the beneficiaries concerned and are easy to understand overall.

In a second step, the average costs for the performance parameters were determined in relation to the defined units. In a final step, the relevant services were weighted among themselves using cost equivalents. In line with the first row of the table, it was assumed that EUR 38 corresponds to 10 points; the points were then rounded to a decimal place. The following table shows the performance categories and the determination of the points (see Table 27 of the final report):

	Performance category	Unit	Costs in euro per unit	Points per unit
	Cleaning performance range	1 km	38.00	10.0
	Bin Collection Performance	100 I	3.90	1.0
inner- city	Cleaning performance for Surfaces	1000 m <sup>2</sup>	11.60	3.0
	Cleaning performance for gullies	1 Unit	9.30	2.4
	Waste quantity disposal amount	1 t	120.00	31.5
	Public relations cost	1 Ma. h	60.00	15.8
	Cleaning performance range	1 km	27.60	7.3
	Bin Collection Performance	100 I	2.60	0.7
Extra-ur- ban	Cleaning performance surface	1 000 m <sup>2</sup>	9.20 Euro	2.4
	Waste quantity disposal amount	1 t	120.00 Euro	31.5
	Public relations cost	1 Ma. h	60.00 Euro	15.8

The cleaning and collection costs may be provided by the "inner-city" or "extra-urban" beneficiaries and can be reported according to the listed service categories. The inner-city area includes services provided on generally accessible areas such as roads, paths, squares, bridges, green and park areas and embankments. In the extra-urban area, services can be provided and reported on traffic areas such as motorways, federal, rural and county roads, forest, woods, recreation areas as well as sea beaches and inland waters (see p. 61 et seq. of the final report). In the inner-city area, the subdivision takes place according to six performance categories. In the extra-urban area, beneficiaries can report their benefits according to five categories.

Under the "Cleaning Performance Route" the power expenditure of all fixed surfaces, such as roads, pavements and cycle paths as well as places are recorded. On the other hand, the "cleaning capacity area" refers only to green spaces and other unpaved areas, as this area is exclusively manually (i.e. manually) cleaned. When determining the score for the performance category "Cleaning performance line-kilometres", both the line cleaning by mechanical sweepers and the partial manual cleaning were recorded.

When determining the score, cost information (such as staff and material costs) associated with the individual services has already been taken into account and must therefore not be shown separately. Similarly, a separate identification of the data collection and determination costs must be waived, as they have been included in the individual service categories. Finally, the total amount of waste from the eligible services for the performance category 'Waste quantity disposal', must be indicated and not differentiated according to the waste from the single-use plastic products.

The service category "public relations costs" can only be invoked by public-law waste management authorities for themselves or for the awareness-raising activities carried out by these third parties (cf. § 3 point 14 of the EWKFondsG).

#### Re § 4 (Entry into force):

This provision regulates the entry into force of the Regulation. It will enter into force on 1 January 2024 together with the payment obligation in accordance with § 12 of the EWK-FondsG. This ensures that the single-use plastic levy is levied for the first time for the calendar year 2024 and that the benefits of the beneficiaries can be reimbursed in 2025 for the entire calendar year 2024.