COMMISSION IMPLEMENTING REGULATION (EU) 2017/699

of 18 April 2017

establishing a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the market of each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (¹), and in particular Article 7(5) thereof,

Whereas:

- (1) In order to ensure uniform conditions for the calculation of the minimum annual collection rate of WEEE by the Member States in accordance with Directive 2012/19/EU, it is necessary to establish a common methodology to be used by Member States where they calculate that collection rate based on the weight of electrical and electronic equipment (EEE) placed on their respective markets, as well as a common methodology for the calculation of the total quantity of WEEE generated by weight in each Member State, to be applied when that option becomes available to Member States in accordance with Directive 2012/19/EU.
- (2) It is appropriate to define in this Regulation specific parameters, including the 'weight of EEE' and 'WEEE generated' to allow harmonised use of the common methodologies for the calculation of the weight of EEE placed on the market and for the calculation of the total quantity of WEEE generated.
- (3) To assist the application of the common methodologies for the calculation of the weight of EEE placed on the market and for the calculation of the total quantity of WEEE generated in a Member State, it is necessary that the methodologies include a calculation tool customised for each Member State.
- (4) Where the data to be reported by producers or their authorised representatives pursuant to Article 16 and Annex X, Part B of Directive 2012/19/EU is not available or not complete, Member States can make substantiated estimates on the quantity of EEE placed on their respective markets. In order to ensure uniform conditions for the reporting, the monitoring and the evaluation of the data, where such estimates have to be made, a common methodology should be used.
- (5) The common methodology for calculating substantiated estimates of the quantity of EEE placed on the market should take into consideration that the quantity of EEE placed on the market in the territory of a Member State should be accounted as the weight of EEE made available on its market, excluding any EEE that have left its territory after being placed on its market. Therefore, and in view of available statistical information, the calculation of the weight of EEE placed on the market should be based on data on domestic production of EEE in the Member State concerned as well as on data on imports of EEE leaving that Member State to either another Member State or a third countries and on exports of EEE leaving that Member State to either another Member State or a third country. Data should be obtained using Eurostat's database (Eurobase) where, in particular, domestic production of EEE is registered under the Community Production system (with PRODCOM codes). Those codes are also connected with the codes in trade statistics (the Combined Nomenclature codes). Statistics on the trade of goods measure the quantity of goods traded between Member States (intra-Union trade) and goods traded between Member States and third countries (extra-Union trade).
- (6) National data on domestic production of EEE, imports and exports is reported under the Community Production system, using PRODCOM codes and not under the EEE categories set out in Annexes I and III to Directive 2012/19/EU. However, where Member States make estimates on the quantity of EEE placed on the market, it is

⁽¹⁾ OJ L 197, 24.7.2012, p. 38.

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important that they use a common classification method to convert domestic production, imports and exports statistics into data corresponding to the weight of EEE placed on their respective markets under the categories of EEE set out in Directive 2012/19/EU.

- (7) For the calculation of the total quantity of WEEE generated in a given year in the territory of a Member State, it is important that Member States use a common methodology, that should take into account data on the quantity of EEE placed on the market of each Member State in the past, data on the lifespans of different EEE, according to its type, the level of saturation of the national market and the differing life-cycles of EEE in the Member States. A WEEE calculation tool based on this methodology should be made available for use by Member States and prepopulated with the necessary data to allow its direct application. Member States should be given the possibility to update the data used in the tool on EEE placed on the market for past years and/or the lifespan data, based on relevant data and evidence to support such updates.
- (8) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 39 of Directive 2008/98/EC of the European Parliament and of the Council (¹),

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation lays down a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the market in a Member State and a common methodology for the calculation of the total quantity of waste electrical and electronic equipment (WEEE) generated by weight in a Member State to be used by Member States, as relevant, for the calculation of the collection rates of WEEE. For this purpose, it also provides for the availability of a WEEE calculation tool, customised for each Member State, which is set up and made available by the Commission as an integral part of these methodologies.

Article 2

Definitions

For the purposes of this Regulation, the following definitions shall apply:

- (a) 'weight of EEE' means the gross (shipping) weight of any EEE within the scope of Directive 2012/19/EU, including all electrical and electronic accessories, but excluding packaging, batteries/accumulators, instructions, manuals, nonelectric/electronic accessories and consumables;
- (b) 'WEEE generated' in a Member State means the total weight of WEEE resulting from EEE within the scope of Directive 2012/19/EU that had been placed on the market of that Member State, prior to any activity such as collection, preparation for reuse, treatment, recovery, including recycling, or export.

Article 3

Calculation of the weight of EEE placed on the market of a Member State

1. Where a Member State calculates the collection rate on the basis of the average weight of EEE placed on the market, that Member State shall calculate the weight of EEE placed on its market in a given year on the basis of the information provided by producers of EEE, or their authorised representatives, where applicable, in accordance with Article 16(2)(c) of Directive 2012/19/EU and Part B of Annex X to that Directive.

^{(&}lt;sup>1</sup>) 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).

2. Where a Member State is not able to calculate the weight of EEE placed on its market in accordance with paragraph 1, it shall instead make substantiated estimates of the weight of EEE placed on its market in the year concerned on the basis of data on domestic production, imports and exports of EEE in its territory. For this purpose, the Member State shall use the methodology set out in Annex I to this Regulation.

Article 4

Calculation of the total quantity of WEEE generated in a Member State

Where a Member State calculates the collection rate on the basis of the quantity of WEEE generated on its territory, that Member State shall calculate the total quantity of WEEE generated on its territory in a given year on the basis of the methodology set out in Annex II.

Article 5

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 18 April 2017.

For the Commission The President Jean-Claude JUNCKER EN

ANNEX I

Methodology for the calculation of substantiated estimates of the weight of EEE placed on the market of a Member State

1. Substantiated estimates of the weight of EEE placed on the market of a Member State in a reference year shall be calculated by using the apparent consumption method, which is based on the equation:

EEE placed on the market(t) = Domestic production(t) + Imports(t) - Exports(t)

Where:

Domestic production(t)	= the weight (tonnes) of finished EEE produced in a reference year <i>t</i> within a Member State.
Imports(t)	= the weight (tonnes) of EEE entering a Member State in a reference year <i>t</i> coming from another Member State or a third country for distribution, consumption or use.
Exports(t)	= the weight (tonnes) of EEE leaving a Member State in a reference year <i>t</i> for another Member State or a third country for distribution, consumption or use.

2. Member States shall use data on the domestic production of EEE by weight reported under the community production system classification (PRODCOM codes).

Member States shall use data on imports and exports of EEE by weight reported under the Combined Nomenclature codes (CN codes).

3. Member States shall use the WEEE calculation tool referred to in Article 1 of this Regulation to convert the quantities of EEE domestically produced, imported and exported which are reported per CN codes into quantities of EEE placed on the market per categories of EEE set out in Annexes I and III to Directive 2012/19/EU.

ANNEX II

Methodology for the calculation of the total quantity of WEEE generated in a Member State

1. The total quantity of WEEE generated in a Member State in a given year shall be calculated on the basis of the amount of EEE placed on the market of that Member State in the preceding years, and the corresponding product lifespan estimated on the basis of a discard rate per product as set out in the following equation:

$$W(n) = \sum_{t=t_0}^{n} POM(t) \cdot L^{(p)}(t, n)$$

Where:

- W(n) = the quantity (tonnes) of WEEE generated in evaluation year *n*;
- POM(t) = the quantity (tonnes) of EEE placed on the market in any year t;
- t_0 = the first year when an EEE was placed on the market;
- $L^{(p)}(t, n)$ = the discard-based lifespan profile for the batch of EEE placed on the market in year *t*, which reflects its probable discard rate in evaluation year *n* (discarded equipment in percentage to total sales in year *n*) and is calculated by applying a Weibull distribution function defined by a time-varying shape parameter $\alpha(t)$ and $\beta(t)$ a scale parameter as follows:

$$L^{(p)}(t, n) = \frac{\alpha(t)}{\beta(t)^{\alpha(t)}} (n-t)^{\alpha(t)-1} e^{-[(n-t)/\beta(t)]^{\alpha(t)}}$$

When the same lifespan parameters are applied over time, the distribution of EEE lifespan is simplified into the following formula:

$$L^{(p)}(t,n) = \frac{\alpha}{\beta^{\alpha}} (n-t)^{\alpha-1} e^{-\left[(n-t)/\beta\right]^{\alpha}}$$

Where:

 α (alpha) = the 'shape parameter' of the probability distribution

 β (beta) = the 'scale parameter' of the probability distribution

- 2. Member States shall use the WEEE calculation tool referred to in Article 1 of this Regulation and developed on the basis of the methodology described in point 1 to calculate the total quantity of WEEE generated in their territory in a given year.
- 3. The WEEE calculation tool shall be pre-populated with data on the quantity of EEE placed on the market for the period 1980-2014 for each Member State, calculated on the basis of the apparent consumption method described in Annex I, and with product lifespan data for the period 1980-2030. The shape and scale parameters of the probability distribution, mentioned in point 1 and determined for each Member State, shall be included in the tool as default values.
- 4. Member States shall enter into the WEEE calculation tool the annual data on EEE placed on the market from 2015 until the year preceding the year of reference, in order to allow calculation of the weight of WEEE generated in a given year.
- 5. Member States may update the data on EEE placed on the market or the product lifespan data used in the WEEE calculation tool as set out in point 3. Before proceeding with such updates, Member States shall inform the Commission thereof and shall provide relevant evidence for such updates, including official market surveys, audit results or analysed and substantiated data resulting from consultation of relevant stakeholders.