

WEEE Recast – Status and Prospect

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Electrical and electronic appliances are a fast growing product group with high diversification. The products contain recyclable material as metals, plastics and rare earths, but also harmful substances and remnants as lead, cadmium, mercury as well as ozone depleting materials, inter alia in the glass of picture tubes, fridges, LCD-screens and computer boards. Their proper disposal, especially in the non-OECD countries, is a particular challenge for the environment and health protection.¹ The European Community has therefore put in place the Directive 2002/96/EG for electrical and electronic waste equipment (WEEE-Directive) on 13th February 2003.²

The WEEE-Directive transfers the responsibility for the take-backs and the disposal of electrical and electronic waste equipment to the producer of these appliances. This comprises the organisation and financing of disposal as well as the assumption of extensive registration and declaration responsibilities. Furthermore, per capita and year a collection target of 4 kg electrical and electronic waste equipment is determined.³

The WEEE-Directive divides the electrical and electronic equipment into ten categories:⁴

- Large household appliances
- Small household appliances
- IT and telecommunications equipment
- Consumer equipment
- Lighting equipment
- Electrical and electronic tools
- Toys, leisure and sports equipment
- Medical devices
- Monitoring and control instruments
- Automatic dispensers

The collection target of the WEEE-Directive is achieved differently throughout Europe. The Scandinavian countries show a markedly overachievement, whereas the new EU-member states partially deviate just as markedly from the target. Nevertheless approximately 65 % of electrical and electronic equipment (EEE) placed on the market is separately collected. In contrast to this, *less than half of this*⁵ is treated and reported according to the requirements of the Directive⁶ The rest is either not treated according to standards or illegally transported

¹ Cf. <http://www.ban.org/toxic-trade-news/>

² Official journal of the European Union: Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE)

³ ibidem

⁴ ibidem

⁵ Commission of the European Communities: Proposal for a Directive of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (Recast) page 3

⁶ ibidem

to third countries, inter alia non-OECD countries.⁷ Basis for this conclusion are comparisons of the declared quantities with the expected volumes of waste electrical and electrical equipment, the so-called *WEEE arising*.⁸



Figure 1: WEEE collection rate 2008

Data source: Eurostat

⁷ ibidem

⁸ United Nations University, Jaco Huisman et al: Waste Electrical Equipment Final Report, Bonn, 2007, page iii

In article 17 of the WEEE-Directive its review is intended within five years. The available revision (Recast)⁹ is justified by the Commission of the European Community basically with four aspects:

The current version of the WEEE-Directive contains (...) *no targets for the re-use of whole appliances*.¹⁰ With this a significant target of the Waste Framework Directive 2008/98/EC is not part of the WEEE-Directive.

In other sectors the WEEE-Directive does in fact contain targets¹¹ (inter alia for registrations, declarations and recycling rates), but (...) *no detailed enforcement requirements in Directive 2002/96/EC which result in lack of enforcement of the WEEE Directive in Member States*¹² Appropriate high is the incentive for illegal treatment, export and free-riding. As well complicating, a high number of small and middle-sized companies are even not aware of the legal requirements out of the WEEE-regulation.¹³

The requirements and guidelines to the registration of the producer is so different, that (...) *the economic actors having to comply with 27 different producer registration schemes*¹⁴. The EU Commission recognizes that this leads to an excessively high burden of administration and to avoidable costs. The estimated total expense for registrations and declarations of producer in the EU is 42.8 million euro per year.¹⁵

Beyond that in Europe there are different implementations of the producer definition. Several states have chosen a so-called *national producer definition*, with which the first importer into a member state becomes a producer in this respective member state. Other states use an *European producer definition*, according to which the first importer into the EU is considered as a producer. In addition to this there are contradictions between the legal guidelines in the member states and their implementation into the regulation of these countries.¹⁶ This requires a detailed knowledge of the individual registration processes per member state – only to come to the correct conclusion regarding the legal responsibility!

Also the product weight definition is not at all regulated standard. Some systems and register in the member states demand a declaration including the weight of incorporated batteries, others not. This leads to non-uniform declarations and rather to submissions of too high sales weights. In these states and in these collective take-back systems, in which recycling fees are calculated on the basis of sales weights, these statements consistently lead to unnecessary high fees.¹⁷

⁹ Commission of the European Communities: Proposal for a Directive of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (Recast)

¹⁰ *ibidem*, page 2

¹¹ Official journal of the European Union: Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE), Art. 5 (5) and 7

¹² Commission of the European Communities: Proposal for a Directive of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (Recast) page 2

¹³ United Nations University, Jaco Huisman et al: Waste Electrical Equipment Final Report, Bonn, 2007, page 7 vii

¹⁴ *ibidem*

¹⁵ *ibidem*

¹⁶ Knut Sander et al: The Producer Responsibility Principle of the WEEE Directive, Hamburg, 2007, page II

¹⁷ Cf. RENE AG, internal study: The definition of weight of electrical and electronic products in the European Community – are incorporated batteries part of the product weight? Eppishausen, 2012

Electronic and electrical waste equipment are subject to (...) *substandard treatment and (...) illegal exports to third countries, among which non-OECD countries.*¹⁸ A study of the Institute of Energy and Environmental Technology e.V. has revealed that the recovery of CFC in selected German recycling companies is still 11 % below the norm target¹⁹ – and this in a country, which is remarkable for high environmental consciousness and according standards. With regard to the illegal exports the German Federal Environmental Agency estimates, that a the majority of the 155.000 tons of yearly exported electronic and electrical waste equipment has not *gone through the system of the ElektroG* (translation of the authors).²⁰ It is further assumed that *¾ of the export volume is subject to disposal.*²¹ (translation of the authors)

For the verification of the WEEE-Directive *interested parties* (member states, NRO, producer of electronic and electrical appliances, consumers, retail trade, municipalities, operators of treatment, recycling or disposal facilities, organisations for the producer responsibility and national producer register) as well as specialists were questioned.²² The target was to increase both effectiveness and efficiency of the WEEE-Directive.²³

The following measures²⁴ are now to be rolled out:

Article 2: The **scope** of the new WEEE-Directive now corresponds to the scope of the RoHS-regulation.²⁵ Finally it has to be clarified, which appliances are excluded. The RoHS-regulation designates an eleventh category for the respective appliances, which does not appear in the present 10 categories of the WEEE-Directive.

Photovoltaic systems are now covered by the Directive.

Article 3: **Definitions** will be adjusted or rather new added. Appliances are to be categorized either as B2C (for users in private households) or as B2B appliances (for other users). With this it is supposed to be clearly discernible, which products at all fall under the Directive. Consistently from this derives, which responsibilities apply for the individual producers. This creates equal basis conditions for everybody. Furthermore the producer definition, the terms of the functional and commercial unit as well as of the components have been stated more precisely.

¹⁸ Commission of the European Communities: Proposal for a Directive of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (Recast) page 2

¹⁹ Institute of Energy and Environmental Technology e.V., Jochen Schiemann: Feldversuch an ausgewählten genehmigten Recyclinganlagen in Deutschland zur Ermittlung der zurück gewonnenen FCKW/HFKW-Mengen aus dem heutigen Kältegerätemix (SG2) im Regelbetrieb, Duisburg 2011 (Vortragsunterlagen des Bayerischen Landesamtes für Umwelt, Augsburg, 2011)

²⁰ Beckmann, J. (LfU): UBA-Studie: Illegaler Export von Elektro- und Elektronik-Altgeräten, Augsburg, 05.07.2011, Vortragsunterlagen, Folien 7

²¹ *ibidem*, slide 8

²² Commission of the European Communities: Proposal for a Directive of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (Recast) page 2

²³ *ibidem*, page 6

²⁴ *ibidem* page 7, 11f.

²⁵ Official journal of the European Union: Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE) Annex 1, page 12

Article 7: The **collection rate** for electronic and electrical waste equipment will be determined on 65 % of the volumes which were sold during the last two years per producer. This rate corresponds to the volume, which presently has already been collected separately in the member states. Four years after the new WEEE-Directive came into force an interim target of 45 %, further three years after the final target of 65 % has to be achieved.

Article 11: The **reuse of the total device** is part of the **disposal and recycling targets**. The targets for medical devices (category 8), correspond to the target of monitoring and control instruments (category 9). The recycling rates have been increased by 5 % in general.

Article 12: The producer can be asked to cover all **costs** for take-back places for electronic and electrical waste equipment of private households.

Retail with sales spaces of over 400 m² has to take back now small electronic devices (< 25 cm) from private end-users even if they do not buy a new device unless an official collective scheme for the collection of small devices exists in the member state.

Article 14: The open declared fee for the recycling costs (so-called visible fee) is now unlimited admissible. The 13th of August 2005 does not longer need to be taken into account when marking the product. Valid are Appendix IV and the European norm EN50419. Correspondingly marking products by adding the black bar to the crossed out wheeled bin is not longer required.

Article 16: **Registration and reporting** are to be harmonized. The national registers are to work inter-operational.

Article 19: The **sanctions** for breaches of the directive are to be effective, proportionate and dissuasive.

Article 20: **Minimum inspection requirements** are intended with the aim for the member states to improve the implementation of the Directive. **Minimum monitoring requirements** apply for of the shipment of electronic and electrical waste equipment.

Annex I of the Directive 2002/96/EG will be **deleted** and it will be referred to **Annex I** in the revision of RoHS-Directive **2011/65/EU**. Instead a new Annex exists with minimum monitoring requirements for the shipment of electronic and electrical appliances (see above).

The **Annexes II, III and IV** of the WEEE-Directive remain unchanged.

The new WEEE-Directive has been adopted by the EU-Council after detailed discussion and vote between EU-Council, EU-Commission and EU-Parliament. 20 days after publishing it will come into force (cf. article 26 WEEE-Directive). At the latest 18 months after publishing the Directive has to be brought into national law in the member countries (cf. article 24 WEEE-Directive). According to the current state of affairs at the time of drawing up this article, it is expected that the new WEEE-regulation will come into force from spring 2014 on.

RENE AG as European Compliance Manager in the sectors of WEEE, batteries and packaging assumes that the take-back and recycling landscape in the EU will not change only by the introduction of new regulations. Therefore markedly more intensive inspections upon the waste streams are necessary. How far these inspections can be achieved and even be improved remains to be seen in view of the workforce in the responsible authorities. An unambiguous, harmonized instruction for the submission of sales volumes is necessary to get the clear weights. The simple status control of a submission of a declaration will not be enough in the future. The sales volumes are the basis for determining percentage collection targets. Mistakes on submission of sales data consistently lead to incorrect results on

collection rates. Therefore audits of producer's declared sales data are necessary more often and more detailed. This also applies with regard to the producer's financing responsibility, for which the appropriate evidences and also the consistency in terms of content have to be verified with the sales data more intensively.

Regarding the reduction of administration burden, the experiences from the first years of the WEE-Directive show that harmonisations throughout Europe are imaginable. The adaption of reporting timelines for the sales data is practicably reasonable. Which work in advance has to be done on the reduction of reporting timelines remains questionable. Also it is to consider that the take-back systems in the countries use different reporting timelines to the national and European level. A reason for this is the cash management of those organisations for financing the upcoming disposal costs. How far the requirements of the actors can be adapted through all countries will be seen in the future. This also applies for inter-operationally working registers. If all EU-countries can agree to a central register is obviously at the moment as unclear as the EU-wide agreement of common and exchangeable standards. The European Forum of WEEE-Registers (EWRN)²⁶ therefore faces challenging questions.

The revised recycling rates require more stringently audits of first and downstream treatment facilities. Here it is important to pay attention especially to the consistency between orders, the weighing notes as well as the derived declarations. With regard to a careful treatment of hazardous material RENE AG is of the opinion that it is necessary to analyse the economic feasibility of processes. The recycling industry is marked by a high pressure on prices, which is especially caused by the producers with high sales volumes. In a polypolistic competitive environment with high commodity-type services, this inevitably leads to sub-optimized recycling processes. From an environmental point of view sovereign price interventions from the governments are desirable at least on problematic product categories. Today recycler and producers refer to the appropriate available standard certificates. However those only give information about the fact if a company works legally correct. A certificate does not state if the process generates the best results from an environmental standpoint. It should not be forgotten that the pollution of the environment is an external effect of the economic performance. National regulation is needed and given here.

Neither Directives nor inspections are however enough for the protection of the environment and a responsible management. In the end the sense of responsibility, the ethical standards and the consequence of each actor matters. In this respect it is the task of producers to demand recycling processes which are optimal relating to the environmental policy and which are at the same time economical realistic. In what way the new WEEE-Directive will help on this is to observe and to hope.

²⁶ www.ewrn.org