


An enhanced definition of **EPR** and the role of all actors.

A WEEE Forum vision for the concept of WEEE Available for Collection and an All Actors Approach to improve official WEEE collection and treatment.





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Executive Summary.

Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) (hereinafter “the Directive”) says that from 2019, the minimum collection rate to be achieved annually shall be 65%⁽¹⁾ of the average weight of electrical and electronic equipment placed on the market in the three preceding years in the Member State concerned, or alternatively 85% of WEEE Generated (WG) on the territory of that Member State.

17 years have passed since the first Directive was published. This legal text presented a pioneering and ambitious approach aiming at environmentally sound management of electronic waste and supported what today is known as circular economy.

Member States were charged with the responsibility of reaching WEEE collection targets and, based on the polluter pays principle and the Extended Producer Responsibility (EPR) principle, producers of electronics were required to finance the collection, recycling, recovery and sound disposal of the WEEE deposited at collection facilities, amongst other things.

Enormous progress has been made during this time – according to Eurostat, 48 million tonnes of WEEE have been collected in the European Union between 2005 and 2018 – and from a legislative point of view all Member States have implemented specific WEEE regulations and have mechanisms to address the requirements of the Directive.

However, after so many years of concerted effort, most Member States are unable to reach the 2019 collection targets.

In those 17 years, producers and producer responsibility organizations (PRO), and other actors in the WEEE value chain, have invested a significant amount of effort to better understand and share best practices on target attainment, and why reaching

the increased collection targets has proved difficult. Numerous studies mapping the destination of WEEE and existing flows have allowed PROs to understand where the unreported WEEE may be going. However, the evidence presented in those studies lead to the conclusion that most undocumented WEEE flows will not be reported and cannot be robustly estimated unless all actors having access to the WEEE have reporting obligations.

EPR means extended producer responsibility, not exclusive producer responsibility

Currently there is a clear discrepancy between the competences and the responsibilities allocated to the actors involved in the WEEE value chain. In practice, many Member States have appointed PROs and producers as the only actors that can effectively contribute to the attainment of the targets. This situation did not take into account who is best placed to act or influence. It did not account for the fact that PROs and producers do not have the levers to access all WEEE and actors outside of the formal WEEE system do, whilst access is needed to meet the targets. Moreover, some Member States have imposed penalties on PROs for not attaining the targets.

Targets for PROs need to be based on the WEEE that is available for collection to them.

One of the key principles of WEEE legislation must be that all actors that can influence collection rates should hold responsibility, based on their actual means of leverage and their access to a significant proportion of all WEEE Generated (WG).

An All Actors Approach is the natural evolution of 17 years of operation of the WEEE system.

Member States using this approach tend to have better collection rates, yet it cannot be seen as an

absolute guarantee for reaching collection targets. A constructive assessment into how realistic the collection targets are is required now, considering 17 years of implementation and the changing nature of electrical and electronic equipment coming onto the market. This document provides insights in what is required to update the policy principles.

The new policy approach as outlined in this paper will result in higher tonnages of reported collection and responsible recycling of WEEE. The fundamentals of the new policy approach consist of:

- The All Actors Approach.
- The revision of the EPR principle using the WEEE Available for Collection concept.
- Adoption of a range of supporting measures to properly report and recycle WEEE.
- A revision of the collection target calculation methods.

The approach proposed shows a role for PROs focused on the means and not just the ends.

Concerning the achievement of collection targets, it distinguishes between:

- The national WEEE collection target, to be met by Member States, in line with the Directive's provisions and to which all national actors having access to WEEE or influence on collection rates must contribute; and
- A legal obligation for producers based on the legal framework set by the Directive and the All Actors Approach. This legal obligation proposed is aligned with the Directive and the competences of PROs and applies to WEEE made available to them at designated collection facilities under prescribed service requirements. A proactive role of PROs is envisaged, in which PROs become one of the main supporters of actions that will increase the officially reported flows.

In addition to this, chapter 4 outlines a number of measures aimed at increasing collection rates and the quality of the WEEE collected, and supporting the implementation of an All Actors Approach. These measures can be tailored and implemented in the way best suited to the Member State in question. It allows for measures to be implemented on the basis of what will achieve the best environmental and economic outcomes, taking into account effective use of resources.

Finally, this vision provides a detailed description of the roles that most national actors that have access to WEEE or are able to influence collection rates should play in an All Actors Approach.

⁽¹⁾ It should be noted that the Directive postpones the achievement of the collection target of 65% POM or 85% WG to Bulgaria, Czech Republic, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia. The derogation is applicable until a date of their own choice which shall not be later than 14 August 2021

Setting the scene.

The PROs in the WEEE Forum have, for the past twenty years, been at the forefront of turning the Extended Producer Responsibility principle into a workable and effective policy approach in Europe and across the world. On behalf of over 31,000 brand owners and producers of electrical appliances, and through contracts with logistics and recycling operators, they have, since their start-up, collected, de-polluted, recycled, and recovered to the highest treatment standards almost 26 million tonnes of waste electrical and electronic equipment. According to Eurostat [1], 48 million tonnes of WEEE was officially documented as collected in Europe between 2005 and 2018. The PROs in the WEEE Forum operate more than 114,000 collection points.

All Member States have implemented WEEE regulations and have mechanisms in place to put the requirements of the WEEE legislation into practise.

The 2020 Global E-Waste Monitor [2] says that Europe is the continent with the highest documented formal e-waste collection and recycling rate (42.5%). In all other continents, the e-waste documented as formally collected and recycled is substantially lower than the estimated e-waste generated.

The PROs in the WEEE Forum, and the producers community that mandates those PROs, have played their role in making the economy more resource efficient, circular and sustainable.

Most Member States attained the collection target of 45% of the average weight of electrical and electronic equipment placed on the market in the three preceding years.

But things changed with the clause in the Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) [3] (hereinafter “the Directive”), that states that “from 2019, the minimum collection rate to be achieved annually shall be 65%⁽²⁾ of the

average weight of electrical and electronic equipment placed on the market in the three preceding years in the Member State concerned, or alternatively 85% of WEEE Generated on the territory of that Member State”.

After almost two decades of concerted and sustained effort, most Member States did not reach the increased collection targets (see Figure 1 and 2), despite the continuous growth of the tonnages of WEEE that is actually collected.

Statistics show an underlying trend regarding the inability of Member States to meet the 2019 targets, which is corroborated by the WEEE Forum members in those countries. When there are examples of countries that reach the targets, they seem to contradict both the overall trend reported and the underlying factors observed across the rest of the EU. Besides the official government data, there are no additional public reports or underlying information available for better understanding the increased collection, but such exceptions are worthy of further investigation.

Figure 1.0 shows that, based on the most recent

⁽²⁾ It should be noted that the Directive postpones the achievement of the collection target of 65% POM or 85% WG to Bulgaria, Czech Republic, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia. The derogation is applicable until a date of their own choice which shall not be later than 14 August 2021

Collection rate compared to EEE POM

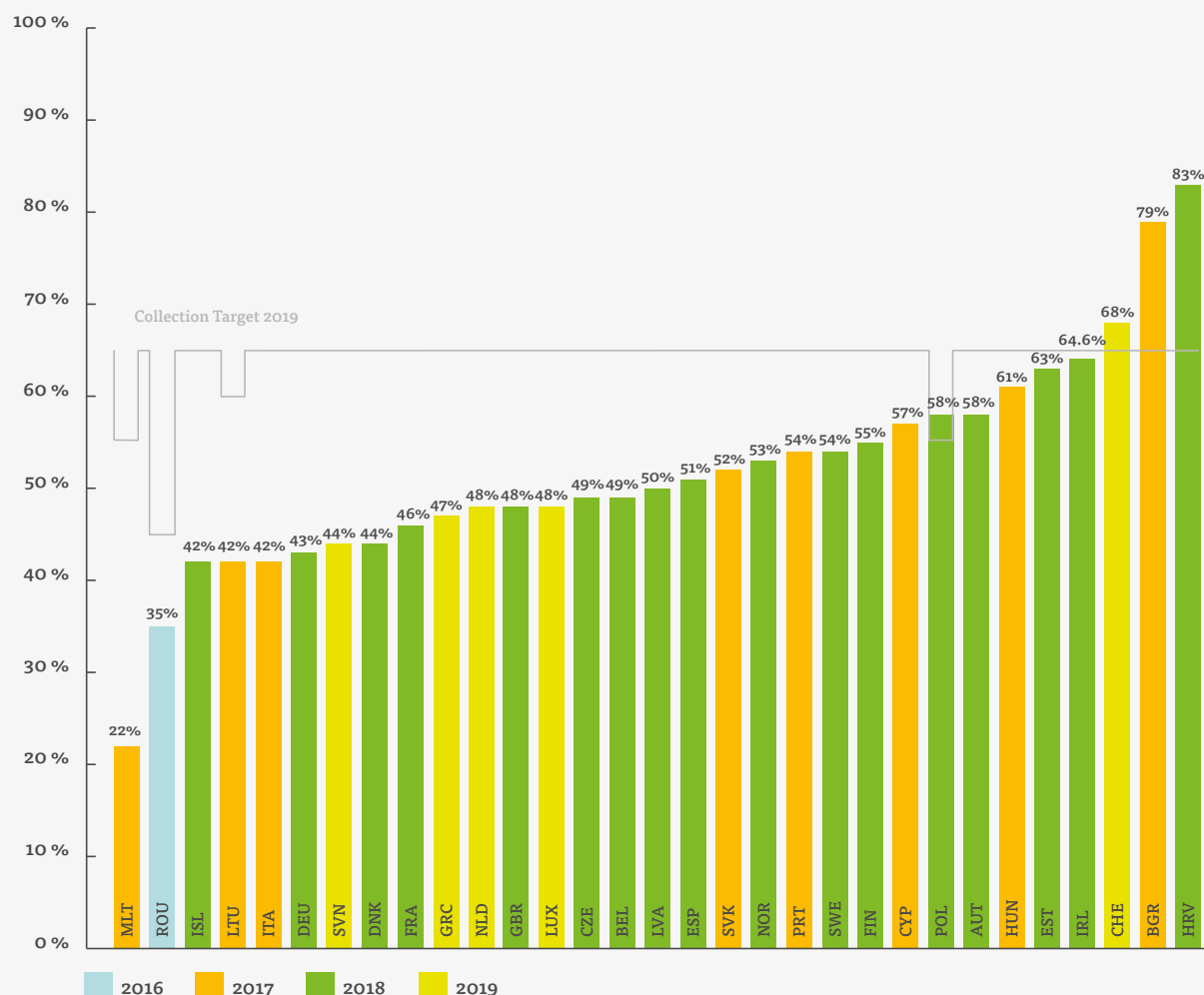


Figure 1.0 Collection rate compared to EEE POM of three preceding years for Member States of the EU-28, Switzerland, Iceland and Norway* [4]

data reported to Eurostat [1], a significant number of countries reported collection rates close to or below 45% and most countries will not achieve the increased 2019 collection target of 65%.

* Aside from the official explanations from governments, there were no additional public reports or underlying information available to better understand the increased collection in Croatia and Bulgaria.

Collection rate compared to WEEE Generated



Figure 2.0 Collection rate compared to WEEE Generated for Member States of the EU-28, Switzerland, Iceland, and Norway [4]

Many factors impede formal collection and reporting such as citizens' behaviours, competition for WEEE from metal scrap collectors, lack of reporting of professional WEEE reuse and recycling, lack of collection of professional WEEE due to exports for reuse, illegal exports of WEEE, long lifespans of photovoltaic panels and inadequate enforcement as well as a lack of monitoring of what is going on in the WEEE market. In its report titled "In-depth Review of the WEEE Collection Rates and Targets in the EU-28, Norway, Switzerland, and Iceland", the United Nations Institute for Training and Research (UNITAR) [4] analyses those factors and provides an overview of actions that countries can undertake to move closer to the collection targets.

It is time for a new WEEE policy approach that will close the distance to target. This vision will provide insights in what is required to update the policy principles.

Quantification of WEEE Flows, 2018 (kg/inh)



Figure 3.0 WEEE flows that could be quantified for 2018 (in kg/inhabitant) [4]

Figure 3.0 gives an idea of the scale of the problem and the distribution of the WEEE flows [4]. The 'Unknown Flows' may constitute under-estimated, non-compliant-unreported recycling activities, such as WEEE in metal scrap, undocumented WEEE exports and Used Electrical and Electronic Equipment (UEEE) exports, of which only partial data was available.

Figure 3.0 also shows that, in order to achieve the minimum collection rate, Member States would have to divert a high proportion (almost all) of WEEE that is currently disposed of in the waste bin, report the WEEE that is mixed with metal scrap and scavenged, reduce illegal exports of WEEE, and start to monitor used EEE exports to distinguish illegal WEEE from legitimate used EEE exports and report non-household WEEE.

Difficulties experienced by practically all Member States in attaining collection targets open up the

debate about how realistic and fit for purpose the collection targets as defined in the Directive actually are. The calculation of the target based on the WEEE Generated methodology requires a great deal of expertise in statistics and modelling and a lot of data which are often not available. This, together with the lack of information that allows to contrast the results of WEEE Generated calculations with reality, has led most Member States to use the POM (placed on market) based methodology to establish the national collection targets. Furthermore, it appears that contrary to what was generally believed years ago, 65% of the volume of EEE placed on market (POM) and 85% of WEEE Generated are not equivalent for most Member States.

In conclusion, the current WEEE regulatory scheme, which is governed by Directive 2012/19/EU, has its limitations.

However, there is no easy “one size fits all” solution. The analysis of the causes of the gap, a review of the way in which the Member States have put the Directive into practise and a closer look at the target setting methodologies have not unveiled a “silver bullet” to counter parallel, unreported, sub-standard and illegal WEEE flows, allowing Member States to meet the targets. Bridging the distance is not as simple as identifying and resolving the methodological constraints, or to change the behaviour of metal scrap dealers or of households. And putting penalties on PROs, or directly on producers, for failing to meet the Member State target is not only undesirable but also does not guarantee or necessarily drive higher collection rates.

The new policy approach as outlined in this paper will result in higher tonnages of reported collection and responsible recycling of WEEE. It will counter parallel, unreported, sub-standard and illegal WEEE flows and support environmentally sound management of WEEE, a key objective of the Directive.

The fundamentals of the new policy approach consist of:

- The revision of the EPR principle using the WEEE Available for Collection concept.
- The All Actors Approach.
- Adoption of a range of supporting measures to properly report and recycle WEEE.
- A revision of the collection target calculation methods.

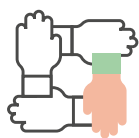
The fundamentals of the new policy approach



Revise targets
calculation
methodology



Promote and
implement measures
supporting AAA



Implement
the All Actors
Approach

The fundamentals of the new policy approach



Revise EPR principle
using the
WAFc concept

All actors and Extended Producer Responsibility.

Article 7 of the Directive says that Member States are, inter alia, charged with the responsibility to ensure the implementation of the producer responsibility principle and, on that basis, that a minimum collection rate is achieved annually, whilst Article 12 says that producers of electrical and electronic equipment are required to provide at least for the financing of the collection, treatment, recovery, and environmentally sound disposal of WEEE from private households that has been deposited at collection facilities.

2.1. Why do most Member States struggle to reach the targets?

WEEE is different from other types of waste in that many WEEE items have an economic value as second-hand equipment (UEEE) or for valuable materials they contain (WEEE). Their net positive value is such that they are attractive to many operators⁽³⁾ (both legitimate and commercial, and illegitimate) most of which have no mandatory obligations within the WEEE regime, yet they benefit financially from the WEEE system and limit what is available to PROs. PROs do not have the legal authority, responsibility, mechanisms, influence or levers to access WEEE or divert WEEE that reaches these operators – nor should PROs have these responsibilities. An illustrative example of this situation (one of many) is raised by the producers of heating, ventilation and air-conditioning appliances, (HVAC), they struggle to get back their products from the market as they no longer have the responsibility with respect to the installation, despite the awareness actions towards the installers. A friction between ownership and responsibility arises. New policy models should support innovative business models to get hold of the end-of-life HVAC appliances. To succeed, market surveillance is required. Additionally, the owner

of the WEEE may decide not to dispose of WEEE (appropriately) the moment the appliances are not used anymore. There are a range of economic and behavioural drivers which affect the fate of WEEE Generated, and unofficial, unreported flows may represent, for some countries, up to two-thirds of the WEEE Generated.

Directive 2012/19/EU

Article 7 | Collection rate

1. Without prejudice to Article 5(1), each Member State shall ensure the implementation of the ‘producer responsibility’ principle and, on that basis, that a minimum collection rate is achieved annually. From 2016, the minimum collection rate shall be 45% calculated on the basis of the total weight of WEEE collected in accordance with Articles 5 and 6 in a given year in the Member State concerned, expressed as a percentage of the average weight of EEE placed on the market in the three preceding years in that Member State. Member States shall ensure that the volume of WEEE collected evolves gradually during the period from 2016 to 2019, unless the collection rate laid down in the second subparagraph has already been achieved.

⁽³⁾ Unreported and incorrectly reported WEEE flows are particularly prone to illegal trade and improper treatment. CWIT and ProSUM EU-funded projects have provided evidence that only one-third of the WEEE collected and treated (CWIT, 2015) is accounted for. Furthermore, many holders and recyclers of WEEE do report, but not to a unified database at Member State level or using different and, worse, incompatible codifications. Another recurring issue is the mixing of WEEE with mixed metal scrap (CWIT).

In many Member States only PROs and producers have been appointed as (sole) contributors for reaching collection targets and have been assigned collection responsibilities usually based on the market shares of their members, even though they have no access to the unreported WEEE and the actors who control these flows have no mandated role within the WEEE regime, and in some cases are operating illegally.

Where is the undocumented WEEE?



WEEE in mixed residual waste



WEEE/UEEE hoarded, passed on



WEEE collected with scrap and/or scavenged



Exports

2.2. Extended, not exclusive, producer responsibility

Producers and their producer responsibility organizations finance most of the costs associated with management of the WEEE officially collected. They have also invested in sharing best practices, undertaking research into WEEE flows and conducting campaigns to collect more WEEE. Numerous WEEE flows studies have allowed competent authorities and PROs to understand where the unreported WEEE may be going. However, they also lead to the conclusion that attempts at capturing these unreported WEEE flows into the formal WEEE system and reaching the minimum collection rate will fail, unless there is a change in the regulatory and enforcement approach.

There is currently a discrepancy between actors' responsibilities, on the one hand, and their actual leverage in the market, on the other. As said, the PROs and producers bear most of the responsibility in most Member States for reaching the collection targets, ignoring the reality that those PROs and producers do not have access to the unreported WEEE flows. Those Member States appear to interpret EPR as meaning exclusive producer responsibility rather than extended producer responsibility.

This results in an impasse. The minimum collection rate cannot be met by PROs alone. All actors that can influence collection rates based on their actual competences and their access to WEEE must play a role. This is called the All Actors Approach.

Actors identified for an AAA



2.3. The All Actors Approach

A policy model is required that will result in less parallel, unknown, unreported WEEE, and more WEEE entering the formal WEEE system.

The All Actors Approach (AAA) can be defined as a policy model whereby all entities, both private entities and public authorities, that have access to WEEE and therefore are involved in the collection, logistics, preparation for reuse, refurbishment, treatment, or recycling of WEEE, or in the associated monitoring, legislative and enforcement activities, are subject to minimum legal obligations regarding, inter alia, compliance with legislation, reporting to the competent authorities, meeting official standards and communication. All actors collaborate in good faith and work towards the common goal of responsible WEEE operations.

Under the All Actors Approach, the producers' obligations apply to WEEE made available to them at designated collection facilities and are required to collect against set service requirements. The All Actors Approach then sets a number of additional requirements aimed at diverting WEEE from unreported, non-compliant and/or unknown flows into reported WEEE – ensuring that there is more robust evidence and data to quantify these flows, but also, more importantly, ensuring that these flows are properly treated and reported whilst allowing other economic or commercial operators to maintain their business operations.

Actors other than producers and their PROs can continue to collect WEEE but henceforth need to be made subject to obligations with respect to reporting and how the WEEE is treated.

The All Actors Approach (AAA) means all actors have legal obligations which competent authorities must enforce to ensure that all actors contribute in line with their requirements. This approach gives rise to more fairness and inclusivity in the market as well as enhanced monitoring based on sustained cooperation. And, importantly, this policy model relies not only on robust enforcement but also coordination.

There is early, supporting evidence that an All Actors Approach, fostered by a coordination body, is an effective policy approach for raising national collection rates. A survey among PROs in the WEEE Forum shows that out of the thirteen countries that were analysed in more detail, eight countries had started to put the All Actors Approach into practise (Belgium, Switzerland, Cyprus, Greece, Ireland, Italy, the Netherlands and Spain). Those eight countries have, even though the All Actors Approach was recently implemented, a collection rate of 45%, compared to 39% on average for the countries that do not.

The amounts of EEE placed on the market and WEEE collected by all actors having access to it should be reported to a national register and included in official WEEE Directive Reporting. Proper treatment in accordance with legal requirements needs to be assured and be included in the reporting.

There is limited data regarding the effectiveness of the All Actors Approach as defined in this paper. However, the effective implementation of the All Actors Approach in the Netherlands indicates that an additional 2.2 kg/inhabitant of WEEE collected and treated/recycled by responsible, CENELEC certified⁽⁴⁾ recyclers that was previously unreported could be attributed to the All Actors Approach. Other initiatives such as BeWEEE in Belgium, reported approximately 20,000 tonnes, on top of the 122,000 tonnes collected/reported by Recupel in 2019, the only PRO in the country.

The All Actors Approach as presented in this document does not allow simple trading of evidence notes, as this is considered a practice that may adversely affect the quality of WEEE treatment. Only WEEE that can be proved to have followed proper treatment should count towards attaining the collection targets.

Annex I provides a detailed description of the roles that most national actors either having access to WEEE or able to influence collection rates should play in an all actors approach.

Section 4 shows a number of measures supporting the implementation of the AAA.

⁽⁴⁾ Most refer to WEEELABEX certified facilities against CENELEC requirements

Chapter 3.

WEEE Available for Collection (WAfC).

If all actors have reporting obligations under the All Actors Approach, the core responsibility for producers and PROs should be captured by a new legal term, the 'WEEE Available for collection': the WEEE that has been deposited at officially designated collection facilities (pursuant to Article 12.1 of the Directive), such as municipalities and retailers (shops). This term better represents the essence of the extended producer responsibility principle. It is more in line with the definition of the 'extended producer responsibility scheme' as laid down in the Waste Framework Directive [5].

Directive 2008/98/EU on waste (Waste Framework Directive)

Definitions

21. 'extended producer responsibility scheme' means a set of measures **taken by Member States** to ensure that producers of products bear financial responsibility or financial and organisational responsibility for the management of the waste stage of a product's life cycle.

Directive 2012/19/EU on WEEE

Article 12 | Financing in respect of WEEE from private households

Art. 12. 1. Member States shall ensure that producers provide at least for the financing of the collection, treatment, recovery, and environmentally sound disposal of WEEE from private households that **has been deposited at collection facilities** set up under Article 5(2).

The term ‘WEEE Available for Collection’ is based on the principle that PROs should collect the WEEE to which they have access, i.e. deposited at collection facilities, or handed over to them, and is aligned with the principle set in Article 12.1 of the Directive. Transposition of the Directive into national law may be stricter than the EU law but should align with the principles of the Directive on all actors contributing to WEEE collection and sharing of responsibilities.

Other actors that have access to WEEE (or can influence collection rates) should also actively contribute to the attainment of national collection targets and new mechanisms are put in place to increase the amount of WEEE entering reported streams. PROs will be key supporters of additional actions that will increase officially reported flows and reduce unreported flows, the emphasis being on the activities and duties of PROs which are aligned with the competences and legal obligations assigned to them.

It should be enshrined in WEEE legislation that PROs are not solely responsible for Member State collection targets and are only accountable for the WEEE that is made available to them.

Directive 2012/19/EU on WEEE **Article 5 | Separate collection**

1. Member States shall adopt appropriate measures to minimise the disposal of WEEE in the form of unsorted municipal waste, to ensure the correct treatment of all collected WEEE and to achieve a high level of separate collection of WEEE (...).

In some Member States, penalties are being imposed on PROs that do not fulfill their collection responsibilities. Penalties may imply (a combination of) the closure of the PRO activity, fines calculated upon non-collected tonnes (e.g. in Romania from 2020, penalties of 0.8 €/kg and 4 €/kg for lamps not collected are envisaged) and other economic instruments (e.g. seizure of the PRO financial

guarantee etc.). Penalties or similar regulatory instruments exist, have been applied and/or are being considered in countries such as Spain, Greece, Ireland, Malta, Poland, Portugal, Romania and Lithuania. Penalties should have a deterrent or corrective effect addressing bad practices or negligent behaviours, however they are useless when a good part of the WEEE arising is simply not accessible by PROs.

Over the years, PROs have achieved a great level of expertise in WEEE management and operations. They also have a deep understanding of the actors and drivers involved in the value chain.

The role of PROs in most Member States goes beyond acting as a financing mechanism, and it has been based on the different responsibilities defined by the Directive. In most Member States, PROs operate as expert partners in proactively improving the quantity and quality of the WEEE collected. The WAFc concept maintains and builds upon this situation and is a natural evolution of the implementation of the WEEE legislation and the evolution of the EEE market, creating a realistic solution adapted to the actual market situation and delimited by the legal responsibilities of PROs.

Producer responsibilities according to WEEE Directive



Register (Article 16)



Report (Article 16)



Collect (Article 12, 13)



Finance (Article 12)



Inform (Article 14, 15)

The All Actors Approach and WEEE Available for Collection concept describe a role for PROs focused **on the means and not just the ends**. With respect to the achievement of collection targets, it is based on three pillars:

A. National minimum collection rate

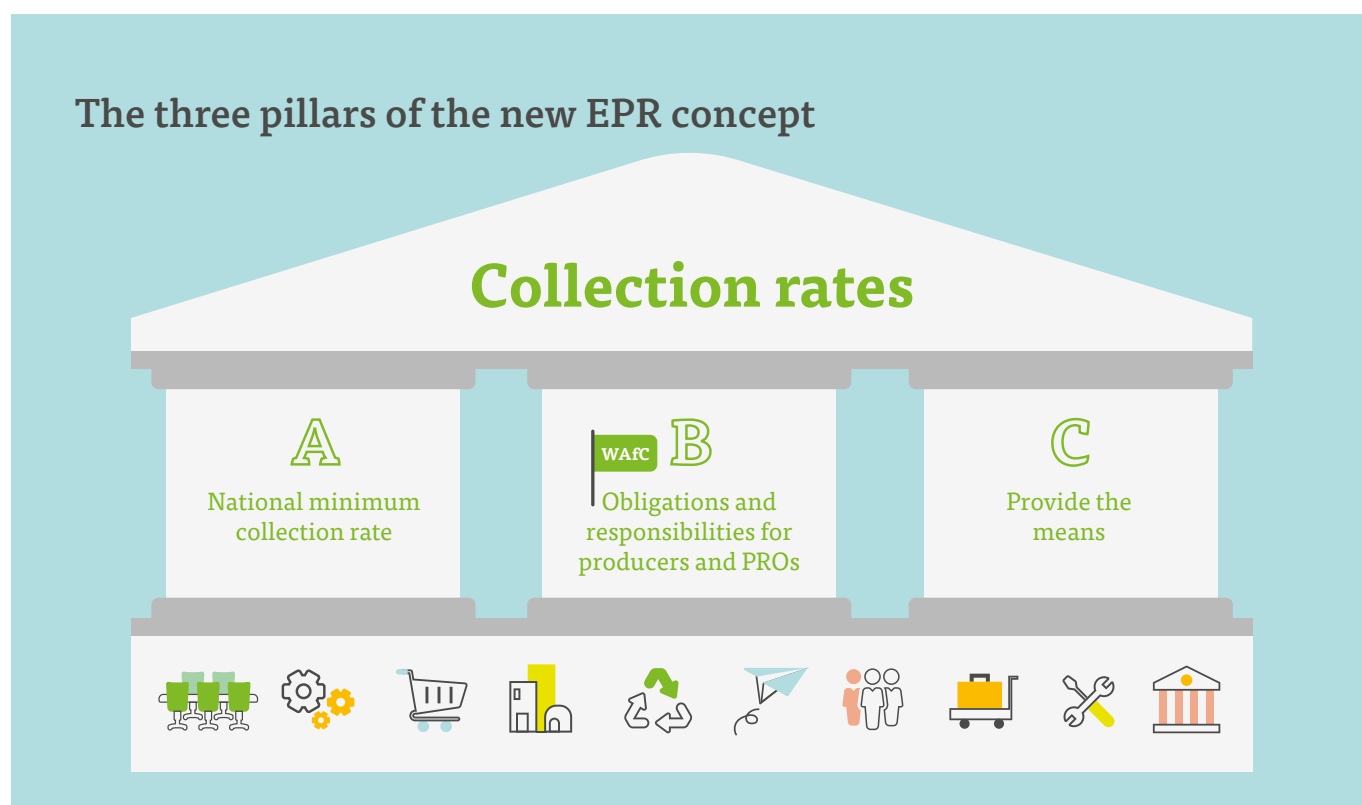
The Member States remain responsible for the attainment of the minimum collection rate as laid down in WEEE legislation; all actors, as defined in this document, contribute to the attainment of the target.

B. Obligations and responsibilities for producers and PROs

The producers' legal obligation is aligned with Article 12 of the Directive, Article 8a of the Waste Framework Directive and the actual levers that PROs are in control of. It refers to the “financing of the collection, treatment, recovery, and environmentally sound disposal of WEEE from private households that has been deposited at collection facilities”, not to all WEEE that arises in the market. Article 8a of the Waste Framework Directive says that “the roles and responsibilities of all relevant actors involved” must be clearly defined.

C. Provide the means

PROs are committed to ensuring the safe and environmentally sound management of WEEE by providing the means to do this. These means will result in higher officially reported, compliant WEEE flows.



Directive 2008/98/EU on waste Article 8a | General minimum requirements for extended producer responsibility schemes

1. Where extended producer responsibility schemes are established in accordance with Article 8(1), including pursuant to other legislative acts of the Union, Member States shall:

(a) define in a clear way the roles and responsibilities of all relevant actors involved, including producers of products placing products on the market of the Member State, organisations implementing extended producer responsibility obligations on their behalf, private or public waste operators, local authorities and, where appropriate, reuse and preparing for reuse operators and social economy enterprises;

It is suggested that PROs play an important role in designing and developing actions that divert unreported flows to official, reported flows. Some of the actions clearly derive from the obligations of the Directive, whilst others are part of the engagement of PROs. In many Member States, producer responsibility organisations provide for the following means:

- Finance and undertake communication campaigns.
- Support the implementation of treatment standards such as CENELEC 50625 series, by means of training programmes, audits, contract conditions.
- Raise awareness on the importance of enforcement.
- Participate in coordination bodies.
- Contribute to incentives geared towards improving the quality of collection, e.g. countering theft, scavenging and illegal operations, incentives being limited to collection points that meet specific requirements, compensation for collection to be adjusted based on the level of scavenging, collection in different WEEE streams;
- Monitor flows by conducting research studies.
- Work in partnership with their producer members to deliver Circular Economy initiatives.
- And so forth...

Chapter 4.

Supporting measures.

The UNITAR study [4] “In-depth Review of the WEEE Collection Rates and Targets in the EU-28, Norway, Switzerland, and Iceland” concludes that further measures are required to identify “how much more WEEE can feasibly be collected and/or reported upon, as well as what mechanisms need to be implemented”. A combination of actions is required to move closer to the collection targets.

In Chapter 4 of the study, UNITAR analyses the factors that affect WEEE collection and offers a set of recommendations. This Section builds upon the results of the analyses and responds to those recommendations by suggesting actions that will divert WEEE from the non-compliant or unknown flows to the compliant, known flows, thereby closing the gap. Most of the measures support the implementation of an All Actors Approach (AAA). It is also based on the expertise, good practices and research arising from the producer responsibility organisations in the WEEE Forum. The measures are numbered for ease of reference, not in priority, since this is a cross cutting set of issues to address.

It is intended that these measures can be tailored and implemented in the way best suited to the Member State in question. This allows for measures to be implemented on the basis of what will achieve the best environmental and economic outcomes, taking into account effective use of resources.

Ten supporting measures



The following sections provide an outline of the issues affecting collection rates, recommendations and actions to address the issues, and finally some examples of practices illustrating the recommendations.

4.1. Establish a coordination body ¹

In the AAA a range of actions from various stakeholders is required, and this calls for the creation of a coordination body. A coordination body is typically a not for profit entity. It may be public, private or of a hybrid nature with competent authorities governing joint activities geared towards increasing collection.

Ideally, a coordination body should be composed of and governed by representatives of national competent authorities, PROs, producers, retailers, local authorities, social economy enterprises, recyclers including licensed scrap and car shredders, brokers, dealers and traders, households, end users, and other collections points (such as installers and demolition companies).

It should manage, inter alia, data collection, monitoring of WEEE flows reporting by all actors, allocation of WEEE collection and the financing responsibility among the different PROs. It is also the entity engaging with stakeholders in the collection network, leading joint communication campaigns, the point of contact for contributing to enforcement planning and coordinate any other means set in place for increasing collection. See Annex I for an overview of responsibilities.

The coordination body facilitates communication between all actors involved in an AAA and third parties, it centralises all joint activities run at national level for increasing collection. This provides better control of tonnages of WEEE collected in a higher and complex network of collection points. Its role is extended to other factors such as facilitating agreements allocating collection responsibilities among PROs, controlling other actors, and many more.

It is proposed that a coordination body:

- Coordinates and monitors the allocation of collection responsibilities.
- Monitors compliance of collection responsibilities and national collection in general.
- Sets a reporting framework/tool and coordinates reporting from all actors.
- Facilitates and channels agreements between PROs and local authorities to support efficient collection of household WEEE.
- Designs strategies for expanding and improving the collection network, such as improving existing collection points or creating incentives for new collectors to be part of the national collection network.
- Coordinates with other sectors for monitoring and traceability (building, car...).
- Funds R&D e.g. running studies on WEEE flows, technical best practice development etc.
- Coordinates national and local communications campaigns for an efficient use of resources.
- Is involved in enforcement planning and supports enforcement.

Importantly, PROs must play a critical role in the governance of the coordination body, for example to ensure that any initiatives are cost-effective, proportionate and fair.



Italy

The Italian Centro di Coordinamento RAEE (CdC RAEE) [6] is an example of a coordination body. The CdC RAEE is managed and governed by Italian PROs under the supervision of the Ministry of the Environment and Protection of the Territory and the Sea and the Ministry of Economic Development. The role and tasks of the WEEE Coordination Center are defined by the Italian transposition of the Directive. PROs have the obligation to register to the Coordination Center. It operates to guarantee the collection of WEEE in the collection network. It also manages incentive programmes like the “Premi di Efficienza”. An advanced reporting system allows for adequate reporting of the tonnages of WEEE sent for treatment and transparent communication to the competent institutions the extent to which the goals have been achieved by the multi-consortium system. The CdC RAEE also collaborates in defining the methodology for the adequate treatment of WEEE and ensures responses to collection requests from the disposal centers. It also collects and reports data relating to collection and treatment. The CdC RAEE also stipulates specific agreements with municipalities, collection companies and national trade associations of Producers, Distribution and Treatment Companies, thus ensuring the monitoring of the WEEE flows, divided by grouping and sorted to the PROs.

4.2. Improve collection network, with a focus on small WEEE

2

The 2015 seminal EU project ‘Countering Illegal WEEE Trade’ [7] has shown that tonnages collected are low in those jurisdictions where the return of WEEE items is not convenient for citizens, for example because the network of collection facilities is not dense. Therefore, for the collected tonnages to go up, the number of points where WEEE is deposited and its visibility should go up too. This higher density of collection points entails a compromise from all actors having access to WEEE, a good monitoring system for WEEE tonnages and coordinating joint strategies.

In many countries, municipalities play a passive role whilst they are in a good position to engage with citizens.

In an AAA, municipalities are expected to play an active role in communication with citizens via targeted communication campaigns and providing adequate infrastructure for the collection network.

Different things will work better in different regions. The coordination body will come up with the best

options to convey the right message to citizens and improve collection.

It is suggested that the coordination body in partnership with other actors, define the criteria describing a sufficiently good collection network. Criteria may include e.g. minimum number of collection points per inhabitant where population density does not exceed a certain threshold, average distance between collection points etc. the coordination body will then trigger adequate actions for achieving it and require the corresponding actors to participate.

An increase in the number of collection points at any cost is not advisable and should be planned considering economic and environmental factors. Besides, in line with the All Actors Approach, these costs should not be charged to producers. Adequate density of collection points must be financed by the Member States, municipalities or even the end users, e.g. in countries with visible WEEE fees.

A special regular EU funding call for improving the collection network and facilitating access to such funding to municipalities would be welcome

(e.g. LIFE, Interreg, but preferably in 100% funded programmes). Adaptation to new items in scope should be considered in this call.

With respect to small WEEE, UNITAR estimates that 1.4 kg/inhabitant [4] EU28 plus Norway, Iceland and Switzerland] of WEEE ends up among mixed residual waste, ranging from 1.9 kg/inhabitant in Northern Europe to 0.8 kg/inhabitant in Southern Europe. Most of this is small WEEE.

Achieving minimum collection rates for this stream is often challenging and costly in most Member States compared to other types of WEEE. Achieving higher collection rates calls for cost-effective and proportionate measures that prevent small WEEE from ending up in residual waste. That, in turn, means, inter alia, increasing the density and visibility of collection points, designing more effective logistics (e.g. micrologistics) and improved targeted communication campaigns.

One suggestion is to appraise the feasibility of collecting small WEEE directly from households in the same bin as mixed dry recyclables with segregation at material recovery and sorting facilities.

Additional EU grant funding aimed at investigating best collection practices for small WEEE and setting them in place would be welcome – preferably in 100% funded programmes. Best practices should address social behaviour (hoarding and wrong disposal), adequate collection network and logistics (environmentally and cost efficient).

2. Improve collection network, focus on small WEEE.



France

The PRO ecosystem and Emmaüs jointly organize regular neighbourhood solidarity collection events on the street to facilitate donation of old appliances. Emmaüs trucks are also present to welcome donors during the PROs solidarity collections. Emmaüs collects donations from individuals made during these events. WEEE appliances are sorted, cleaned, repaired and resold at solidarity prices by Emmaüs or, failing that, decontaminated and recycled in strict compliance with environmental standards. Even when the donated devices cannot be repaired, Emmaüs receives financial compensation from ecosystem for its participation in the collection of used devices. The money collected by Emmaüs from the resale of old devices promotes employment and professional integration, accommodation and the fight against poor housing, as well as the fight against over-indebtedness. Ecosystem organised around 450 events every year.

2. Improve collection network, focus on small WEEE.



Ireland

Working closely with their partners in Local Authority and Community Recycling Groups in each location, WEEE Ireland collected 835 tonnes of WEEE in 2019. Public local collection events were promoted locally through press, radio, PR, social media and local community networks. This targeted promotion of WEEE Ireland Public Collection Day Events supported annual increase efficiencies of operations to yield clear and positive results – increase 17% compared to 2018.

4.3. Extend the role of retail and logistics in WEEE collection

3

In the AAA the participation of all actors having access to WEEE should be secured. Retailers constitute a powerful contributor to WEEE tonnages collected and one of the main pillars of the WEEE collection network.

Enforce and implement the current requirements for retailers to take back WEEE and set additional requirements. Measures should consider facilitating the participation of retailers and reverse logistics with a low administrative burden and the use of tools that will ensure easy traceability of the WEEE collected.

The Directive already sets a frame for involving both small and large retailers in WEEE collection. All retailers have a 1:1 take-back obligation for all types of WEEE meaning that they have to actively promote and offer the service of take-back of WEEE during delivery of a new product of the same type. Furthermore, retailers with a sales area exceeding 400 m² already have the obligation to serve as a collection point for small WEEE regardless whether the end user returning a small WEEE wants to purchase a new product or not – this is referred to as the 0:1 take-back obligation. Current measures for retailers taking back small WEEE in-store set by WEEE legislation (1:0) could be revised and extended to some types of retailers, provided that an impact assessment concludes that extending such obligations to smaller retailers, <400m², is environmentally sound and cost effective, and extended to take-back during delivery. Take-back during delivery is a legal obligation in Italy.

WEEE collected via the retail channel should be traceable and reported to a national database or the coordination body.

Where appropriate, retailers should be allowed to collect and make their own arrangements to get WEEE treated, provided it is to the relevant standards and reported to the national register.

Retailers may set agreements with PROs to facilitate the traceability and reporting and access to containers. PROs may finance containers and collection to treatment facilities, based on minimum tonnage and the right of free uplift to be agreed through the coordination body, ensuring that collections are effective and reduce transport inefficiencies.

Communication campaigns overseen by the coordination body should involve retailers and request they play a relevant role in communication.

Additionally, it is suggested that logistics service providers delivering products are legally allowed to take back small WEEE on behalf of local retail and online marketplaces. In this practice, take back should be monitored to tackle illegal practices after delivery. PROs should be encouraged to set up agreements with logistics service providers delivering products for this purpose. This practice would help to improve the collection network and facilitate a door to door service for small WEEE. Currently there are legal barriers in some Member States for promoting the use of reverse logistics, e.g. transport of waste may require a specific permit.

Finally, distance sellers should clearly provide information on take back services to customers. A proactive role for retail associations and collaborative initiatives managed by the coordination body should be adopted. Such activities should be underpinned by enforcement and inspection.



The Netherlands

The Wecycle Premium Pick-up Partners provide a pick up service for small appliances in the Netherlands. When a new large electrical appliance is delivered, users can also return old small appliances to the delivery person. This service has been set up between Wecycle, the main PRO, and EEE sellers and their logistic service providers.



Ireland

In 2017 WEEE Ireland finalised development of the new Licences.ie Retailer Registration portal, to support easier certification for retailers who supply EEE, industrial and automotive batteries onto the Irish market. Licences.ie is a Government service for online applications and payments, operated by An Post and, as it is available to government departments, agencies and regulatory bodies under a Services Framework Agreement. By 31 December 2017, a total of 7,382 retailers had registered with WEEE Ireland for certification under the Free Retailer Registration programme, enabling exemptions from other waste authorisations normally required for waste collection activity.

4.4. Count WEEE collected with metal scrap whilst ensuring proper treatment

4

WEEE often ends up in mixed metal scrap and is recorded in waste statistics as metal scrap instead of WEEE. More disturbingly, part of that flow is treated illegally at rudimentary scrapyards. Most of that WEEE consists of large and metal rich items, such as large equipment, refrigerators and air conditioning equipment. Some of it is shipped outside Europe for processing. According to UNITAR, collecting robust data on the amount of WEEE in metal scrap is problematic, considering that legal actors are not mandated to report illegal operations and the data is not harmonised.

A small number of studies have nevertheless attempted to quantify this flow [4]. They indicate that between 2.8 kg/inhabitant in Belgium to as much as 5.8 kg/inhabitant in the Netherlands of WEEE can be found in mixed metal scrap, recycled in the Netherlands or exported. The average quantity per inhabitant for the EU28 plus Norway, Iceland, Switzerland is 2.1 – with a large standard deviation of 1.3 kg/inhabitant, indicating that the data is not harmonized and varies across Europe.

To counter the problem of WEEE mixed with metal scrap, scrap metal processing facilities and authorised treatment facilities are to operate to standards and to report on the WEEE which they recycle.

There are different types of measures aiming at this end. One policy approach is called **mandatory handover**, which says that all WEEE management is carried out exclusively by permitted WEEE collectors and recyclers that are contracted with PROs, and all WEEE that is collected by actors other than permitted actors is to be handed over to the PROs or permitted ones. Responses to a survey by the WEEE Forum show that this approach has been successful in France (2017), Ireland and the Netherlands, countries which have just a few producer responsibility organisations that have a hand in glove relationship with the authorities. The principle has also been introduced in Belgium and Romania.

According to UNITAR [4], out of the four countries that have recently implemented the mandatory handover, c.q. Belgium, France, Ireland and Romania, the average collection rate is 45% in 2018, compared with 41% for countries without mandatory handover and without All Actors Approach in place. The UNITAR study estimates the positive impact of mandatory handover to be at least 0.8 kg/inhabitant based on monitoring from countries that have recently implemented this approach. France indicates that at least 2.9 kg/inhabitant more formal WEEE collection could be attributed to mandatory handover in 2018 and is still increasing.

An alternative approach could be to require that the scrap dealers' permits include reporting of separated WEEE from scrap received at their facilities. When the operator receiving WEEE mixed with scrap is not allowed to treat WEEE, this should be separated from the scrap and handed over to a licensed treatment operator.

A more aggressive approach suggested is to simply ban collection of WEEE mixed with scrap. This approach may be implemented gradually, with an initial phase in which WEEE mixed with scrap is either returned back to the originator for separation or a notice is sent informing that WEEE mixed with scrap will not be accepted anymore from a certain date. This approach requires high enforcement in order to avoid the creation of new parallel unreported flows of WEEE mixed with scrap.

It is suggested that an appropriate enforcement and legal framework is set in place so WEEE mixed with scrap and not treated to the equivalent standard to WEEE is not counted towards the collection targets nor included in the calculation of substantiated estimates. Such bad practices set an uneven playing field between Member States, contribute to unreported flows and reward improper treatment of WEEE.

These measures require monitoring of reporting, auditing of operations, the design of robust methodologies to monitor WEEE in scrap and vigorous enforcement campaigns to ensure participation of all facilities receiving WEEE mixed with scrap.

4. Count WEEE collected with scrap and ensure proper treatment.



France

In the framework of mandatory handover, scrap dealers and shredders managing WEEE have legally binding obligations e.g. to be referenced and sign contracts with PROs, including detailed specifications on regulatory compliance, upstream traceability, sorting, integrity of appliance and monitoring. Three years after the implementation of mandatory handover in France, about 500 scrap dealers and shredders are under contract with PROs, although they do not account for the totality of scrap dealers and shredders in France, they represent close to 20% of total WEEE collection by French PROs in 2019.

4.5. Awareness and behaviour change ⁵

Many studies show that there continue to be issues around citizens not knowing how or where to dispose of their electricals. WEEE often ends up in the waste bin or is put on the street and picked up by metal scrap dealers that engage in sub-standard practices. Two other behavioural aspects that influence WEEE collection are hoarding and reuse.

Whilst reuse extends the lifespan of products, hoarding simply postpones the moment of disposal, both result in less WEEE Generated (WG) and less WEEE available for collection within three years after placed on the market. A rough estimate of the number of non-functioning items in French households reveals that around 5 kg/inhabitant are not working, and 17 kg/inhabitant are rarely used but still functioning. The trouble is that it is hard to get hold of the items that are still functioning, for several reasons, such as that people are emotionally attached to their smart phones, may consider giving them to friends or to charity or may be concerned about the data stored in them. When extrapolating the French data to Europe as a whole and correcting for different WEEE Generation levels, the average impact is between 4-5 kg/inhabitant.

Hoarding, disposal habits and preferences need to be monitored through regular tracking campaigns.

PROs are to co-ordinate consistent communication campaigns – in liaison with the coordination body. Additional campaigns run by localities can also be promoted by PROs through an incentives system of funding managed by the coordination body. PROs should be involved in messages around sorting at local level.

5. Awareness and behaviour change.



France

Ecosystem is participating in the Tour de France. Earlier in the year, a large campaign was launched for collecting used telephones throughout the territory which were sorted, tested and reconditioned and redistributed on the 35 stages of the Tour to Associations. Several social actors were welcomed on the stage of the 35 stopover towns to receive the phones, which will then be distributed to the most disadvantaged. This important upstream work enabled ecosystem to count around 200 press reports and to collect 10,000 telephones thanks to the www.jedonnemontelephone.fr solution, where users can contact by mail the PRO and will get a pre-paid mailing option for shipping their phone to a reuse center. In addition to this, the ecosystem caravan, on the other hand, highlights the importance of donating, repairing or recycling all WEEE to give them a second life. A team of 10 ambassadors also educates the public, bringing together educational information on recycling and fun activities.

5. Awareness and behaviour change.



United Kingdom

Recycle Your Electricals is a UK-wide campaign encouraging and supporting more people to reuse and recycle their old electricals – saving precious resources from being lost forever. It is funded through the Compliance Fee, payable by PROs who have insufficient collections to meet their targets in the event there is insufficient WEEE available for collection.

4.6. Involve customs

6

Smaller products with a higher value, such as mobile phones, as well as IT, consumer and specialist, professional equipment, such as medical appliances or electric generators, feature prominently in the flow of WEEE exported.

Monitoring of UEEE (used electrical and electronic equipment) exports is essential to understand what tonnage of products placed on the market is not becoming WEEE inside the Member State and to ensure that all exported UEEE are legal and not mixed with illegal WEEE exports. Furthermore, unfortunately there is currently no distinction between UEEE and new products in customs nomenclature.

The role of customs needs to be enhanced.

Customs are involved in the quantification of imported products, which is quite relevant now that online (distance) selling is a commercial practice of growing significance – in some Member States tight collaboration between competent authorities and the private sector, notably PROs, have reduced the rate of (online) free-riding significantly.

The legally exported WEEE for treatment at a recycling facility outside the Member States, as permitted under the Waste Shipments Regulation, are monitored by the legal authorities. This is a valuable source of data for monitoring the treatment of WEEE outside the Member State and should be counted towards the national WEEE collection rate of the country exporting the WEEE for recycling.

In addition to this, customs could inform (new) importers of EEE about the take back obligation and request evidence of compliance. They should also be involved in measures aimed at unequivocal reporting and quantifying exports for reuse of both household and professional WEEE.

Finally, a specific custom code for UEEE is required to improve inspections by customs. Strong collaboration between customs, enforcement

agencies and PROs would help in measuring and monitoring and countering illegal WEEE exports.

6. Involve customs.



The Netherlands

Under the auspices of the WEEE Monitoring Council a Joint Working Group investigated the exports of WEEE and UEEE. For exported WEEE the data of WSR permits were compared with the reports to the National WEEE Register, which led to additional reporting. For the quantification of the export of UEEE several studies were conducted and a voluntary pilot with producers gave insight in several million kilograms exports for reuse, mainly ICT. As part of the broader UNU Dutch WEEE Flows update, the substantiated estimate of export for reuse was quantified using 6 different data sources. Based on this study the National WEEE register deducted 21,000 tonnes (5%) from the Put On Market, increasing the collection rate with 2.5%. For specific categories like small ICT the impact was much bigger, up to 24% of the POM. Furthermore legislation was put in place for all actors to report the volume of exports for reuse, including for brokers, traders, ITAD companies and parties that did not have any reporting obligation yet.

4.7. Design specific measures aimed at professional WEEE and PV panels ⁷

Return rates of professional WEEE are usually quite low and they affect the attainment of the collection target (see Table 1).

	EEE POM		WEEE Collection	
Category	B2B	B2C	B2B	B2C
Large Household Appliances	8%	92%	2%	98%
Cooling and Freezing Appliances	13%	87%	3%	97%
Mixed WEEE	25%	75%	7%	93%
IT (excl. Screens)	42%	58%	19%	81%
Screens	7%	93%	0%	100%
Lamps	6%	94%	19%	81%
Average	17%	83%	5%	95%

Table 1.0 Share of B2B and B2C in EEE POM and WEEE collection from the WEEE Forum Key Figures data from Austria, France, Lithuania, Spain, United Kingdom, and Belgium

There are various ways in which this phenomenon can be explained. Professional equipment (B2B) have long lifespans and therefore take longer to reach the collection facility than household equipment (B2C). They have a large reuse, repair or refurbishment potential and they are collected by specialist businesses, many of which choose to export them. Most professional equipment have high (metallic) value and are delivered to scrap dealers. Professional equipment in buildings are often disposed of during demolition and not always separated from other building wastes and scrap metal. Consequently, this type of waste is not collected by PROs and does not enter the officially reported flows.

UNITAR [4] has estimated the maximum potential for a country to collect professional WEEE using Eurostat data. Greece, Latvia, Portugal and Luxemburg report collection of less than 0.15 kg/inhabitant from professional sources,

whereas Norway and Iceland report 6.44 and 3.49 kg/inhabitant respectively (2017). Austria, France, Lithuania, Spain, United Kingdom and Belgium collected and reported on average 0.41 kg/inhabitant, which is very low.

The UNITAR report estimates that the potential amount of professional WEEE that could be diverted to official WEEE collection is 1.8 kg/inhabitant, of which most potential is expected to be in Northern and Western Europe, with respectively 2.3 and 2.2 kg/inhabitant.

It is suggested that further investigation on the causes of such low return rates is promoted, preferably through public funding and managed by a coordination body. Research should be aimed as well at identifying generators of B2B equipment and understanding the drivers behind disposal behaviours. The results must be used for the

definition of specific measures aimed at increasing collection in this particular flow.

Additionally, specific awareness raising campaigns should be run targeting generators of professional equipment, amongst which installers represent a key actor. Moreover, traceability of professional equipment shipped for refurbishment should be enhanced in these campaigns and national statistics should consider such amounts appropriately.

In terms of photovoltaic panels (PV panels), UNITAR [4] estimates that the impact of PV panels on the target based on EEE POM is, on average, 0.6 kg/inh in 2018, or 4% of the total target but the amount can be higher for individual countries as differences exist between countries. The two countries with the highest impact are the Netherlands and Malta, with 11% and 10% of the total, respectively. The collection rates of PV panels are currently very low, as they are not yet arising as waste due to their long lifespans of more than 15 years. Therefore, the target based on the put on market methodology is not achievable for PV panels.

The Directive does not set a specific category for PV panels, nor a specific collection target and in most Member States, the collection target based on the put on market methodology is applied, this means that in order to reach collection targets, the low return of PV panels has to be compensated for by collecting higher amounts of other types of appliances which implies a distortion of the basic principles of the Directive.

Implementing Decision 2019/2193/EU lays down rules for establishing data formats for the purposes of Directive 2012/19/EU. It states that for category 4 'large equipment', data shall be reported under two sub-categories, namely '4a: Large equipment excluding photovoltaic panels' and '4b: Photovoltaic panels'. However, PROs in some Member States like Poland and Portugal are still required to report PV panels mixed with other category 4 waste types, making it impossible to trace and monitor the actual behaviour of PV panel flows and falling into the situation described in the previous paragraph.

Intensive research aimed at understanding the flow of professional equipment and PV panels should be conducted at EU level for considering well founded separate collection targets. In the meantime, other alternatives such as service upon demand schemes should be explored and considered a valid solution during and after this transition process.

7. Set specific measures and Targets for B2B and PV-panels.



France

UNITAR [4] singles out France as a country that does not make photovoltaic panels subject to the collection target. PV CYCLE France, the specialist PV panel PRO in the country, is required to respond to all pick-up requests, which has been the case since the sector's launch. Photovoltaic panels have started to be installed in significant quantities since 2010 in France. Considering that they have a lifespan of 20 to 25 years, PV CYCLE France estimates that the cruising speed volume will be reached around 2030, with 50,000 tonnes collected per year. In France, this young sector is already working well since the majority of producers are in compliance and that the recycling rate is the highest among all categories of equipment. Additionally, France set separate collection targets for B2B appliances. The targets are progressive and PROs are allowed to include in their collection data the amount of Used EEE exported for reuse reported by producers.

4.8. Promote circular economy

The Circular Economy Action Plan [8] put forward by the European Commission as part of the EU Industrial Strategy presents measures that extend products' active use-time, promote the implementation of reuse standards (such as CENELEC EN50614) and labelling of repaired products, set up repair outfits recognised by original equipment manufacturers and so forth.

New circular business models enhance product traceability at their end of life, such as leasing of products. It is suggested that EU research programmes continue promoting new circular business models. In this respect, business models should take into account the final disposal and traceability of the appliances so they contribute to formal preparing for reuse and/or WEEE treatment flows.

When preparation for reuse of products are made subject of quantitative targets, WEEE collection targets must be adjusted and take into account the life extension of such products. The way in which products are used, prepared for reuse and recycled should be based on the dynamics of the circular economy. The tonnage of WEEE prepared for reuse, if properly reported, does not affect the WEEE collection rates, since it takes place only after the WEEE is collected. Reuse, on the other hand, affects the WEEE Generation, and consequently collection, since it extends the lifetime of EEE.

The pressure set up on Member States and PROs for achieving collection targets is somewhat a distraction to properly invest and design future actions delivering a circular economy. The set up of realistic collection targets could certainly help in this respect and boost the development of circular economy strategies.

PROs are encouraged to support measures and activities to deliver the Circular Economy and ensure accountability and traceability of WEEE prepared for reuse, such as:

- Promoting standards for treatment and reuse (such as CENELEC EN50614 and EN series 50625).
- E-libraries.
- Repair outfits recognised by manufacturers.
- Facilitate access of WEEE to preparing for reuse.

8. Promote circular economy.



Belgium

The Papillon project sought to help low-income families reduce costs with resource-efficient household appliances. This collaborative effort between BSH Home Appliances s.a. and the Samenlevingsopbouw West-Vlaanderen social enterprise aims to replace outdated household appliances with new, efficient equipment, whilst at the same time analyze the potential of a sustainable appliance rental model.



United Kingdom

ILM Highland, a charity and social enterprise based in Alness in the Highlands of Scotland, are working in partnership with Repic, the biggest PRO in the UK, and the Highland Council to dispose of WEEE from 26 recycling centres throughout the Highlands. The town of Alness is one of the lowest areas of deprivation in the UK with a high unemployment rate. This partnership has enabled ILM Highland to sustain 15 full time jobs and give on the job training for 2 trainees per year. Over the last 10 years the partnership has collected 240,000 t of WEEE. ILM also operates a reuse department that has submitted 1,370 tonnes of reuse to the settlement centre since 2010. ILM sell these items at a reduced rate to families in financial hardship. Over the last 10 years ILM has sold over 15,000 refurbished appliances to families throughout the Highlands. In doing this ILM has assisted 12,000 households with savings of £2,250,000 compared to purchasing new products. This also has an environmental impact where it has made 438,600 kg of CO₂ savings⁽⁵⁾. Being a charity ILM where a surplus is made this is reinvested into its charitable aims of supporting vulnerable people to be at home and to support its Care & Repair and Handyperson Services.



The Netherlands

During the COVID-19 crisis we saw a sudden spike in sales of IT devices to allow for home education. NLdigital, a trade association, started an initiative #AllemaalDigitaal to collect used laptops and tablets from member ICT companies. In close collaboration with professional refurbishment parties and government and school institutions, in several weeks over 7,000 devices were collected, data wiped and re-distributed to the schools and children in need, bridging the digital social gap and providing a circular solution.

⁽⁵⁾ Figures workings out as per the Reuse Network calculator

4.9. Enforce the law ⁹

The enforcement of rules for collection and responsible recycling is a key ingredient of the new policy approach. Even though it is not possible to quantify the impact of enforcement on WEEE collection, and considering the fact that so much WEEE ends up in the waste bin (mixed residual waste) or is illegally handled, dismantled or exported, enforcement authorities play a pivotal role in countering malpractices and sub-standard operations and improve the WEEE market.

An All Actors Approach can only work if everybody who is involved in WEEE operations does what they are supposed to do. Enforcement is key for this.

In that respect, it is recommended to promote communication campaigns geared towards informing and engaging with actors at the initial stages, and coordination, monitoring and enforcement campaigns and measures after that. The existence of a coordination body to facilitate such campaigns is encouraged for an efficient use of resources.

It is strongly advisable to run targeted enforcement campaigns geared towards:

- Ensuring all actors report properly, and
- Process WEEE according to legally binding treatment standards such as CENELEC EN50625 series.

The coordination body must act as a platform facilitating communication between collectors and enforcers dealing with complaints regarding theft, fly-tipping or scavenging.

The coordination body should provide feedback and intelligence to the design of enforcement and inspections campaigns and promote the collaboration of all actors in such actions.

9. Targeted law enforcements.



France

OCAD3E, the clearing house, offers local authorities the services of a lawyer to obtain legal support in complaints related to scavenging or theft and offers safety diagnosis of municipal collection points. It requires also the marking of large WEEE collected by partner municipal points and scrap dealers are not allowed to purchase marked WEEE in contract with PROs. Marked large WEEE collected at collection points provides evidence of theft to enforcers when such appliances are spotted at scrap facilities not contracted by PROs.

9. Targeted law enforcements.



Estonia

EES Ringlus, the main PRO, explained the problem of inadequate reporting to the enforcement agencies, which, whilst acknowledging that attaining the minimum collection rate is a Member State responsibility, then started to force metal scrap dealers to use the European Waste Catalogue (EWC) codes properly, i.e. distinguishing between WEEE and non-WEEE in metal scrap.

4.10. Monitor WEEE flows 10

Many Member States do not to produce their own WEEE Generated calculations. They have unreliable data on the quantities of WEEE that is mixed with metal scrap, is disposed of in the waste bin (residual waste) or the exports of UEEE. This is obviously a problem, for no action can be undertaken if the facts are missing or wrong. Additionally, information on national WEEE flows is required for designing appropriate collection strategies.

Facilitated by the coordination body, Member States should run studies and develop harmonised methodologies to know where the missing WEEE flows are and use this information to both design targeted measures for improving collection and calculate collection targets adequately.

Whilst it is a prerogative of competent authorities to monitor the market and WEEE flows periodically and enforce the law, most targeted actions can be undertaken in liaison with or involving the other actors on the market.

More specifically, it is suggested Member States set in place a national monitoring plan with state-of-the-art monitoring. State-of-the-art monitoring means:

- Calculate a national version of WEEE Generated.
- Identify exports for reuse (so they can be discounted from placed on the market numbers).
- Require reporting by brokers, producers, NGO, refurbishers... and control the reporting.
- Assess the WEEE in waste bin.
- Assess the tonnage of WEEE counted as scrap.
- If necessary, identify areas where the use of substantiated estimates would complement the All Actors Approach.
- Quantify illegal exports.
- Investigate alternative methods, such as the WEEE Flows method, to calculate WEEE Generated.
- Coordinate harmonised WEEE flows monitoring at EU level.
- Understand the relationship between economic business cycles and the placed on the market target and the WEEE Generated target.

- Set up a Scavenging Observatory or Theft Task Force in charge of monitoring, awareness raising campaigns and suggesting measures to counter scavenging and theft.
- Promote local benchmarking.

Ideally monitoring should be carried out and supported by the coordination body.

10. Monitor Flows.



Romania

Ecotic, one of the PROs in Romania, commissioned in 2019 the study 'Quantification of waste of electric and electronic equipment generated in Romania, comparative study 2019 vs 2015'. 2015'. Data from consumer survey revealed:

- A total amount of household WG equal to 8.3 kg/person (30% lower compared to E-tool WG).
- 2.8 kg/person (34% of WG) are being reused/donated/refurbished and thus their life is extended; the hand-over of such appliances to relatives/friends or third party will not necessarily generate discarded equivalent equipment.
- 2.1 kg/person (25% of WG) are discarded through channels that are not reachable to compliance schemes or are leading to sub-standard treatment.

PROs and WEEE networks in other countries like Belgium, the Netherlands, France, UK, Ireland, Italy, Portugal etc. have contributed to similar studies that help provide a clearer picture of the national WEEE flows. This information is crucial for shaping strategies that will improve collection rates.

Improvements in target calculation.

Member States are liable for reaching the minimum collection rates. Based on the experience of some of them, an AAA and the supporting measures outlined in this document would certainly increase collection rates but are not a guarantee for reaching the targets. This shows that the current collection targets are not realistic.

The EU should consider reviewing the target setting methods.

Additionally, high collection targets under the POM approach conflict with the current waste hierarchy that promotes waste prevention and the extension of the life of appliances. It should be noted that in the following years all actors (manufacturers, consumers, reuse operators) will focus on enhancing the durability, reparability and reusability in order to extend the lifetime of electrical and electronic products.

In general, and conceptually, the WEEE Generated method, especially when corrected for economic fluctuations, can be considered a better measure to identify the tonnages of WEEE that arise and can be collected. However, the calculation of this target is complex and data demanding, and requires some data that is difficult (or impossible) to get hold of and harmonised among all countries. Since the target based on POM is less data demanding and easier to implement and understand, most countries are using it. In addition, it has been shown that the WEEE Generated target may differ greatly from the 65% of EEE POM target, which indicates that the assumption of both targets being similar is wrong.

The UNITAR report dives into detailed technical recommendations for improving the calculation of both collection targets.

5.1. Improvements for target based on EEE POM

The common calculation method, implementing Regulation 2017/699, allows exports for reuse to be deducted from the POM, either based on reported data or substantiated estimates. It is to be recommended that all Member States quantify the volume of export for reuse and deduct these volumes from the POM in the calculation of the collection target.

Chapter 5 of the UNITAR study [4] shows that the main methodological constraint of the EEE POM target calculation methodology is the volatility due to the PV panels and the business cycle. The latter is especially a problem when the EEE POM declines and WEEE collection suddenly declines too.

A simple correction could be to calculate the denominator of the same year as the reference year of the nominator. However, it could be that this would lead to even more volatile targets, and the impact should be researched in more detail per Member State prior to the adoption of such measures, as the EEE POM is not a measure of the amount of WEEE that is generated.

The recommendation to correct for the volatility is that Member States might consider using a hybrid methodology of both methods, POM and WG. This is also proposed in a forthcoming report of the Irish EPA. The rationale is that for some categories it will be better to use the WEEE Generated methodology; for example, for PV panels, a mono-product category with a strong market increase and long product life spans. For other categories it may be more relevant or feasible to have a target based on 65% of EEE POM. Methodological criteria may be defined to support Member States in their decision to use the EEE POM methodology or the WEEE Generated methodology per category.

5.2. Improvements for target based on WEEE Generated

Chapter 5 of the UNITAR report concludes that conceptually the WEEE Generated methodology is more appropriate for the purpose of calculating the collection target. However, there are certain elements that have to be improved in most countries.

The main shortcomings of the WEEE Generated target methodology are the fluctuations in the tonnages that arise for collection (WEEE Generated) due to economic and business cycles and possible inaccuracies of POM and lifespans.

The following recommendations are suggested: Improve the WEEE Generated methodology to reflect economic fluctuations. This would lead to a downward correction of WEEE Generated in the years when the annual change of EEE POM is negative and to more WEEE Generated in the years after that. This would need an amendment of the definition of WEEE Generated in the common methodology.

The second recommendation is addressed to the Member States. The Member States have to validate the EEE POM that is used for the WEEE Generated calculations, in particular if they suspect discrepancies, such as those occurring in southern and eastern Europe, between the EEE POM of the national registers and the apparent consumption methodology. However, it must be ensured that the EEE POM that is the basis of the WEEE Generated is

not substantially under covered due to free-riders, and conversions of the national classifications into the UNU-KEYs are needed. This could be checked by cross checking EEE POM, lifespans with empirical studies on the number of items that are in use and in hibernation.

Member States ought to construct national lifespans regularly, such as in Romania where the reuse culture is more prominent than in other countries. The lifespans can be obtained from surveys, and further accuracy can be gained if the EEE POM and lifespans are compared to empirical data on the number of items in use and in hibernation.

Finally, the WEEE Generated methodology should be improved for professional equipment and new items in the scope of WEEE legislation.

Conclusions.

After nearly two decades since the creation of EU legislation on WEEE and the concerted effort of PROs, producers and many other actors, and despite the continuous growth of the tonnages of WEEE that are collected, most Member States will not reach the increased collection targets as of 2019.

The latest UNITAR study highlights the factors that impede formal/official collection and concludes that, in order to achieve the minimum collection rate, Member States have to divert a high proportion of WEEE that is currently disposed of in the waste bin, reduce most of the WEEE that is mixed with metal scrap, reduce illegal exports of WEEE and start to monitor used EEE exports to distinguish illegal WEEE from legitimate used EEE exports and report professional WEEE.

There is sufficient evidence to demonstrate that the European Union should consider designing a new WEEE policy approach to counter parallel, unreported, sub-standard and illegal WEEE flows and to promote documented collection and responsible recycling of WEEE. The new policy approach as outlined in this paper will result in higher tonnages of reported collection and responsible recycling of WEEE. The fundamentals of the new policy approach consist of:

- The revision of the EPR principle and the allocation of collection responsibility using the WEEE available for collection concept.
- The All Actors Approach.
- Adoption of a range of supporting measures to properly report and recycle WEEE.
- A revision of the collection target calculation methods.

The approach proposed in this document shows a role for PROs focused on the means and not just the ends.

Concerning the attainment of collection targets, it distinguishes between:

- The national WEEE collection target, to be met by Member States, in line with the Directive's provisions and to which all national actors having access to WEEE or influence on collection rates must contribute, and

- a legal obligation for producers based on the legal WEEE framework set by the Directive and the All Actors Approach. This legal obligation proposed is fully aligned with the Directive and the responsibilities of PROs and apply to WEEE that is made available to them at designated collection facilities and which they are required to collect against set service requirements. A proactive role of PROs is envisaged, in which PROs become one of the main supporters of actions that will increase the officially reported flows.

In addition to this, supporting measures developed by the WEEE Forum, will support the implementation of the AAA:



It is intended that these measures can be tailored and implemented in the way best suited to the country in question. This allows for measures to be implemented on the basis of what will achieve the best environmental and economic outcomes, taking into account effective use of resources.

Specific responsibilities and roles are suggested for implementing an efficient AAA. One of the key pieces is the creation of a coordination body that will ensure the participation of all actors having access to WEEE or that may influence collection rates. The coordination body will at the same time be the reference point for any issues related to WEEE and ensure proper monitoring of WEEE results and fluid communication between all actors involved.

Whenever possible, incentives are set in place for encouraging participation of actors, but it should be noted that an AAA to work properly requires a high level of enforcement.

Finally, this document stresses the fact that based on the experience of some Member States, an AAA certainly increases collection rates but it is not a guarantee for reaching collection targets, therefore a revision of the calculation methodology of collection targets is required.

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Annex I.

The actors and their responsibilities.

This section describes the main actors and their responsibilities in the All Actors Approach (AAA).



National competent authorities include:

- Member State governments
- National waste authorities

Enforcement bodies:

- Inspection and customs

The role of national competent authorities in this AAA is about providing an appropriate legislative frame that will ensure all actors influencing collection will contribute to reaching national collection targets matching their competences.

Some of the actions that are envisaged for national (waste) competent authorities in this AAA are:

- Set up a coordination body.
- Ensure appropriate coordination amongst all actors is carried out through a coordination body, and including regular interaction and synergy building between policy makers and enforcement bodies, such as customs and inspection.
- Legislative support providing means for increasing collection, such as:
 - » Setting up policies requiring all actors to report.
 - » Regulating and enforcing reporting including reporting of UEEE/WEEE exported and imported.
 - » Defining a legal frame promoting the use of reverse logistics in WEEE collection.
 - » Regulate and enforce mandatory handover of WEEE to PROs.
 - » Making CENELEC standards mandatory.
 - » Etc.
- Contribute to monitoring / measurement campaigns of Complementary flows (e.g. MSW).
- Support targeted awareness raising campaigns at national level.
- Provide clear and harmonized collection and sorting guidance to local authorities.

Enforcement bodies, and in particular inspection, have a relevant role for ensuring the success

of an AAA. Besides incentives and legislative endorsement, inspection campaigns are key to guarantee a level playing field for all actors.

Enforcement bodies are to set up national targeted inspections and measures for:

- All actors reporting WEEE received and UEEE exported/imported.
- Proper WEEE treatment, and
- Reporting of producers (addressing the issue of freeriding).

Customs ensure reporting of import and export or UEEE/WEEE. A critical assessment of the current practices should be done to set up an appropriate improvement plan that will:

- Allow an unequivocal traceability of UEEE and WEEE trans frontier shipments.
- Ensure appropriate treatment of WEEE is carried out outside Europe.
- Increase reporting of UEEE/WEEE from shipment companies.

International multi-stakeholder groups are encouraged for addressing trans-frontier movement, adequate knowledge and training.



Coordination body (see also section related in this document).

In an AAA, all stakeholders that may influence WEEE collection rates should contribute to the attainment of the national collection targets. A coordinated response for ensuring an efficient use of resources and adequate monitoring requires coordination between parties and fluid communication.

Ideally, a coordination body should be composed of representatives of all actors that may influence collection rates. PROs must play a critical role in the governance of the coordination body, for example to ensure that any initiatives are cost-effective, proportionate and fair.

It is proposed that a coordination body:

- Coordinates and monitors the allocation of collection responsibilities.
- Monitors compliance of collection responsibilities and national collection in general.
- Sets a reporting framework / tool and coordinates reporting from all actors.
- Facilitates and channels agreements between PROs and local authorities to support efficient collection of household WEEE.
- Designs strategies for expanding and improving the collection network, such as improving existing collection or creating incentives for new collectors to be part of the national collection network.
- Coordinates with other sectors for monitoring and traceability (building, car...).
- Funds R&D e.g. running studies on WEEE flows, technical best practice development etc.
- Coordinates national and local communications campaigns for efficient use of resources and consistent and well researched messages and campaigns.

- Is involved in enforcement planning and supports enforcement.

The coordination body may be financially supported by public and/or private funding. The responsibilities allocated to producers (e.g. art. 14 and 15 of the WEEE Directive), though managed by the coordination body for an efficient use of resources and consensus, will remain financed by producers.



EEE Producers and PROs.

The ‘WEEE Available for Collection’ concept is based on the principle that PROs should collect the WEEE to which they have access, i.e. deposited at collection facilities, or handed over to them, and is aligned with the principle set in Article 12 of the Directive. Producers and PROs contribute to the attainment of the WEEE collection target but they are not the only actors to do so.

Furthermore, other activities supporting the collection of WEEE are already carried out by PROs in some Member States, and are listed here as activities to be encouraged in other Member States. PROs may:

- Set up a coordination body (see previous section).
- Design tailored collection solutions (e.g. proximity collection, agreements with retail and reverse logistics and other collection points etc.).
- Contribute to incentives geared towards improving the quality of collection, e.g. countering theft, scavenging and illegal operations, incentives being limited to collection points that meet specific requirements, compensation for collection to be adjusted based on the level of scavenging, collection in different WEEE streams*.
- Contribute to set up of reporting tool for all actors*.
- Support studies or research on illegal exports, WEEE flows, best available techniques, etc.*
- Contribute to inspection training and auditing programmes, sampling, etc.*

- Encourage and support proper treatment by running conformity verification activities* and setting specific agreements with WEEE and scrap operators, or supporting the implementation of treatment standards such as CENELEC 50625 series* by means of training programs, audits, contract conditions etc.
- Provide support and intelligence to enforce reporting of all actors involved*.
- Finance and carry out targeted awareness raising campaigns*.

Most of the activities above (*) should preferably be carried out through a coordination body.



Retail.

Including household and non-household WEEE.

Retailers constitute one of the pillars of the WEEE Collection network. It is suggested that each Member States explores the possibility of extending the 1x0 obligation to other retailers in addition to the ones cited in the WEEE Directive (selling surface > 400 m²), provided collection is economically and environmentally sustainable.

Retailers, in addition to the legal requirements applicable, are suggested to:

- Participate in a coordination body.
- Collect small WEEE (incl. non-household retailers), in store and at delivery.
- Report WEEE received, preferably using tools that will lower this administrative burden*.
- Promote the use of reverse logics.
- Contribute finances to a central body for consumer campaigns*.
- Provide any support required for tackling practices leading to irregular flows and treatment of WEEE (especially during delivery take back)*.

Only in a fully implemented AAA, retailers should have the choice of arranging and paying for treatment of the WEEE collected at their facilities if they wish, and reporting it, provided they reach a proper treatment or handing it over to PROs with the right of free uplift and PROs pay for treatment.

Retail associations and representatives of the retail sector are encouraged to proactively involve their members in awareness raising campaigns partnering with PROs and preferably through a coordination body (*). It is proposed that retail associations participate in R&D and initiatives promoting the use of reverse logistics for WEEE collection.



Local authorities.

Local authorities should be considered the main pillar of the WEEE Collection network. A proactive and active role in promoting WEEE collection among their citizens is suggested for municipalities in this AAA. In particular local authorities, in addition to the legal requirements applicable, should:

- Participate in a coordination body.
- Set agreements with PROs for handing over WEEE received at their facilities*, when this is not required by law, and municipalities are entitled to hand over the WEEE to a downstream acceptor, additional control and evidence based traceability and proper treatment should be ensured by for example laws setting up tendering conditions.
- Carry out targeted, harmonized and clear awareness raising campaigns*.
- Implement measures for fighting theft and scavenging.
- Monitor and benchmark WEEE collection, scavenging and theft rates.
- Collaborate with enforcement for tackling thefts and scavenging issues by reporting such practices, training of staff working at collection points and implementing measures for reducing scavenging rates and thefts.
- When competence allows, local entities to run enforcement campaigns against illegal treatment and misreporting of WEEE.

Activities marked with an * should preferably be facilitated by a coordination body.



Other collection channels (e.g. B2B collection points, installers, demolition companies, social economy, etc).

The AAA promotes the expansion of the collection network by the addition of all actors that have access to WEEE. This includes businesses, installers of equipment such as PV panels or A/C, demolition and construction companies, social economy entities, repair services, public institutions etc.

Contributions of such collectors to the WEEE collection rates should be traceable and follow official flows.

For achieving all of the above, it is suggested that they:

- Become registered WEEE collectors upon requirement / take back and collection obligations. It is encouraged that the procedure for authorizing or registering such activities is free of charge and simple, otherwise, it may be a deterrent for these activities to become part of the collection network.
- Report any WEEE received and its fate to an official database.
- Ensure traceability and treatment of the WEEE collected in officially recognized facilities.
- Provide any support required for tackling practices leading to irregular flows and treatment of WEEE.

These collection channels are encouraged to set agreements with the national PROs and benefit from the resources PROs can tap into for an adequate handling of the WEEE.



Preparing for reuse.

Preparing for reuse organisations are becoming more and more relevant and supported by the W/EEE sector. Their role as contributors to the circular economy is undeniable. In certain Member States, they offer an efficient collection network that should be used for collecting WEEE whenever it is possible.

Alliances between preparing for reuse organisations and PROs have shown good results in some Member States. PROs and preparing for reuse organisations in other MS are encouraged to learn from successful experiences and try to replicate them.

It is important to ensure proper traceability of the WEEE that is handed over to preparing for reuse organisations. Exploring efficient and safe ways for ensuring access to WEEE to preparation for reuse is also encouraged.

In this AAA approach, it is suggested that preparing for reuse organisations:

- Participate in a coordination body.
- Become authorised WEEE collectors.
- Report any WEEE received and its fate to an official database.
- Set up alliances with PROs for ensuring reporting of WEEE and proper management of it.
- Comply with preparation for reuse standards such as EN50614.
- Provide any support required for tackling practices leading to irregular flows and treatment of WEEE.



WEEE treatment companies.

Including:
WEEE recyclers and licensed (for treating/
accepting WEEE) scrap and car shredders.

In many Member States, recyclers are not only dealing with treatment. They may act as logistics and collection companies as well and can be a relevant part of the WEEE collection network.

Having access to WEEE, they become a contributor to the attainment of the national WEEE collection targets in this AAA.

Some Member States do not entitle companies treating scrap for the specialist treatment of WEEE but are receiving WEEE mixed with scrap and treating it as the latter. In this case, and for a full implementation of this AAA, such companies should either become authorised companies for treating WEEE or separate WEEE from scrap and send the WEEE to an authorised facility.

It is suggested that metal recycling companies:

- Comply with standards that will include traceability protocols.
- Report on the amounts of WEEE received, categories, activity undertaken and fate of the WEEE and/or resultant fractions, either via agreements set with PROs, authorities or to a national database.
- Scrap facilities collecting or receiving WEEE mixed with scrap under a licence or registered exemption, must report on WEEE received and treated, or send to an authorised WEEE treatment facility.
- Provide reports on treatment quality to a coordination body.
- Contribute to law enforcement by supporting audits/inspection programs.



Brokers, dealers, traders, other actors involved in legal export of UEEE/WEEE (producers, NGOs, facility managers...).

Some types of WEEE can follow the path of a valuable commodity. Brokers, dealers, traders and alike are part of the value cycle of WEEE, and as actors having access to WEEE they must be obliged to contribute to the attainment of national collection targets aligned with their competences and bearing in mind their limitations.

It is suggested that they:

- Report any WEEE received and its fate to a national database.
- Report any UEEE exported/ imported either via agreements set with PROs, authorities or to a national database.
- Provide evidence of proper treatment of WEEE traded.
- Provide any support required for tackling practices leading to irregular flows and treatment of WEEE.




Citizens/Business/Public sector-WEEE generators.

The levels of hoarding and the rates of wrong disposal may be significant in some Member States, and are practices occurring in all of them. Citizens, and WEEE generators in general, are the first holders of WEEE and decide disposal paths, hence, they are key players for ensuring correct disposal and increasing collection rates.

Citizens should be encouraged to:

- Reduce hoarding.
- Stop disposing of WEEE through the wrong channels.



An enhanced definition of **EPR** and the role of all actors.

November 2020

About the WEEE Forum a.i.s.b.l.

The WEEE Forum a.i.s.b.l., set up in 2002, is a Brussels-based international association representing forty producer responsibility organisations across the globe. Together with our members, we are at the forefront of turning the extended producer responsibility principle into an effective electronic waste management policy approach through our combined knowledge of the technical, business and operational aspects of collection, logistics, de-pollution, processing, preparing for reuse and reporting of e-waste. Our mission is to be the world's foremost e-waste competence centre excelling in the implementation of the circularity principle.

The producer responsibility organisations of the WEEE Forum are based in Australia, Austria, Belgium, Bosnia, Canada, Czechia, Cyprus, Denmark, Estonia, Italy, France, Greece, Iceland, India, Ireland, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Nigeria, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

The WEEE Forum is the biggest organisation of its kind in the world. In 2019, its member organisations reported collection and proper de-pollution and recycling of 2,500,000 tonnes of WEEE. Members in 2020: ANAKYKΛΩΣHΣYΣKEYΩN, ASEKOL, Australia New Zealand Recycling Platform, Cobat RAEE, Ecologic, ecosystem, Ecotic, ECOTIC, Ecotrel, EES-Ringlus, EGIO, Electrão, Electrocyclosis Cyprus, Electronic Products Recycling Association, ElektroEko, Elektrowin, El-Kretsen, elretur, Environ, EPRON, ERION, Φωτοκύκλωσης, Karo Sambhav, Norsirk, Recipo, Recupel, Recyclia, RENAS, Repic, RoRec, SENS eRecycling, SWICO, UFH, Úrvinnslusjóður, Wecycle, WEEE Ireland, WEEE Malta, WEEE Recycle and Zeos.

Find out more on www.weee-forum.org

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