

The Producer Responsibility Principle of the WEEE Directive

Final Report

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1. Executive summary

1.1. Background and objective

The Directive 2002/96/EC on waste electrical and electronic equipment (WEEE) addresses a particularly complex waste flow in terms of variety of products, association of different materials and components, contents in hazardous substances and growth pattern. It is based on the principle of producer responsibility to create the link between the production phase and the waste phase of a product and concerns various actors involved in the life cycle of electrical and electronic equipment (EEE), such as producers, distributors, consumers and operators of treatment plants.

A review of the Directive is scheduled for 2008. To inform this review the Commission has contracted this study that focuses on the Producer Responsibility Principle of the WEEE Directive and its implementation in the Member States.

It is conducted with the following objectives:

- to provide a thorough evaluation of the operation of the Directive's provisions relating to producer responsibility obligation for WEEE;
- to consider options to improve the operation of those obligation in the EU; and
- to consider the impacts, efficacy and efficiency of the Directive from an environmental and economic and, as far as possible, social perspective.

1.2. The Producer Responsibility Principle

The Producer Responsibility Principle as a policy principle can be summarised as "concept that manufacturers and importers of products bear a degree of responsibility for the environmental impacts of their products throughout the products' life-cycles, including upstream impacts inherent in the selection of materials for the products, impacts from manufacturers' production process itself, and downstream impacts from the use and disposal of the products. Producers accept their responsibility when they design their products to minimize the life-cycle environmental impacts and when they accept legal, physical or economic responsibility for the environmental impacts that cannot be eliminated by design" [Davis, Gary 1994].

The WEEE Directive put the principle in concrete terms and allocates concrete responsibility on stakeholders involved in the lifecycle of electric and electronic products.

1.3. Implementation of the Directive in the Member States

A qualitative analysis of the current arrangements in the Member States for the implementation of the producer responsibility provisions has been performed and an analysis of the impacts of the interaction between these arrangements on business selling in or onto the internal market. Based on this analysis problems have been identified for the operation of the producer responsibility obligations. Essential findings are:

Producer Definition

What has emerged as a significant issue in the transposition process is how MS have interpreted importers and exporters under Article 3(i) sub-point (iii). That is, whether import/and export is defined on the national level (**'National Approach'**), or whether it refers only to the trade with countries outside of EU and not intra-community trade (**'European Approach'**).

22 MS obligate the first importer of EEE products into the national state as producer in the absence of a manufacturer. "European" approaches are defined in the legal text 3 times (Finland, Spain and the UK). However, in practice the situation might differ from the "European" approach of the legal text, e.g. in Finland foreign producers are not able to register directly to the national register.

With the national approach there can be some unfavourable consequences. There is for example the potential that multiple producers exist for the same product when traded on intra-community level. Another example is a potential conflict with incentives for product and product system improvements and questions may arise with respect to how a wholesaler or distributor can meet the obligations of a designated producer as outlined in the WEEE Directive. While in order to facilitate Individual Producer Responsibility for EEE producer identification was deemed essential identifying wholesalers as producers may not be useful in providing incentives for product and product system improvements in the first place.

Allocation of Responsibility for Collection of WEEE from Private Households

Regarding physical responsibility, the Directive does not explicitly identify who should be responsible for setting up the infrastructure as stipulated in Article 5 (2) (a). It puts the onus on distributors to accept WEEE from consumers on a one-to-one basis when selling new products, although Member State can deviate from this requirement if they can show that an alternative procedure is just as convenient for consumers (Article 5 (2) (b) (c)).

Concerning financial responsibility, Article 8 (1) indicates that producers are financially responsible for "at least" the collection from collection points

onwards, leaving a room for extending the producer responsibility to finance collection from households.

The provisions of the WEEE Directive provide some room for Member States regarding the collection from households Member States take a variety of ways in allocating responsibility which are summarised in the table below.

Table 1: Allocation of Responsibility for Collection of WEEE from private households in National Legal Text: EU 27

Member State	Physical Responsibility	Financial Responsibility
Austria	D/M/P	D/P
Belgium (Brussels)	D/M	D
Bulgaria	P	P
Cyprus	P	P
Czech R.	D/P	D/P
Denmark	M	M
Estonia	D/P	D/P
Finland	D ¹ /P	P
France	D/M/P	D/P
Germany	M	M
Greece	P	P
Hungary	P	P
Ireland	D/M	D//P
Italy	D/M	D/M
Latvia	P	P
Lithuania ²	D/M/P	P
Luxembourg	D/M	D/M
Malta	D/P	D/P
Netherlands	D/M	D/M
Poland	D	D
Portugal	D/M/P	D/P
Romania	M	M
Slovakia	D/P	D/P
Slovenia	D/M	D/M
Spain	D/M	P
Sweden	P	P
UK	D/P	D/P

D = Distributor, M = Municipality, P = Producer (definition varies between national and European approach)

An implication of the involvement of municipalities in the collection of WEEE from households is that it may create a disturbance to a level playing field for producers that choose to set up their own independent compliance schemes. This is because they may not have access to collection sites that is potentially subsidised by municipalities. Industry has argued that collection costs have little or no connection to eco-design incentive and therefore producers should never be given the obligation to finance such activities. Their aspiration is reflected in the WEEE Directive text within the opening lines of Recital 20, where financial

¹ In the Waste Act Section 18h(2) it is stated that sellers of EEE shall accept WEEE from private households if replaced by purchasing a similar product, or shall direct the purchaser to another reception point

² Based on the legal text as well as other policy documents, see Section **Error! Reference source not found.**

responsibility of producers is suggested to begin from collection point onwards and not the collection from households. However, when considering the polluter pays principle, it may not be appropriate that general tax payers, rather than consumers of EEE, finance the collection of WEEE from private households.

Allocation of Responsibility for Collection, Treatment, Recovery, Recycling and Disposal of WEEE from Private Households deposited at collection points

Article 5(4), Article 6(1) and Article 8(1) combined refer to allocation of responsibility for the collection, treatment, recovery, recycling and disposal of WEEE deposited at collection sites. Member States are unanimous in their assignment of responsibility to producers for this obligation and there are no deviations on this issue.

Financial Mechanism: WEEE from Private Households

In terms of allocation of financial responsibility for WEEE from households, Article 8(2) and (3) of the WEEE Directive distinguishes between historical and new WEEE. The distinction between the financial mechanism to be applied for new WEEE and historic WEEE is that producers bear individual financial responsibility for new WEEE. Meanwhile, as producers could not influence the design of products placed on the market before the directive came into force, the WEEE Directive assigns collective responsibility for this historic WEEE on all producers on the market when the costs to manage it will arise.

Article 8 has been attributed to having significant importance for the producer responsibility principle with respect to establishing incentives for producers to design products for improved end-of-life management. This is because of the individual legal and financial responsibility placed on producers to finance the management of waste from “his own” products – individual financial producer responsibility.

Looking at the national transposition of outcome of the above table we can distinguish 3 distinct patterns regarding how Member States interpret Article 8(2) with respect to individual financial responsibility for new WEEE:

<p>Pattern 1: Financing the management of waste from their own products for new WEEE</p> <p>In the countries listed below the legal text clearly distinguishes that producers are required to finance the waste from their own products placed on the market after 13 August 2005.</p>	<p>Belgium (Brussels, Flanders)</p> <p>Cyprus</p> <p>Czech Republic</p> <p>Estonia³</p> <p>Luxembourg</p> <p>Malta</p> <p>Netherlands</p> <p>Romania</p> <p>Slovakia</p>
<p>Pattern 2: Variations of 8(2) or Ambiguous Interpretation</p> <p>The following countries, in our opinion, have not formulated their legal text in such a way that an explicit individual financial responsibility is assigned. That is, in many cases producers responsibilities for products placed on the market after 13 August 2005 are mentioned in the plural form which makes for an ambiguous interpretation that producers in general are responsible for financing waste from their products.</p> <p>We find other variations of Article 8(2), such as in the case of Germany and Austria, where producers are given the choice to decide of whether or not they are individually or collectively responsible financially for products placed on the market after 13 August 2006. Additionally, in the case of Ireland, producers that are members of an “approved body” are exempt from Article 16 on financing WEEE from private households which clearly assigns an individual financial responsibility for new WEEE.</p>	<p>Austria</p> <p>Belgium (Walloon)</p> <p>Germany</p> <p>Hungary</p> <p>Ireland</p> <p>Italy</p> <p>Lithuania</p> <p>Poland</p> <p>Portugal</p> <p>Spain</p> <p>Sweden</p>
<p>Pattern 3: Individual Financial Responsibility for New WEEE missed</p> <p>MS have transposed Article 8(2) in such a way that for new WEEE the provision that producers should be individually responsible for the waste from their own products appears to be ignored. In many of the countries listed, allocation of financial responsibility for new WEEE is to be determined by a current market-share when costs are incurred, as in the historical WEEE financing mechanism.</p>	<p>Bulgaria</p> <p>Denmark</p> <p>Finland</p> <p>France</p> <p>Greece</p> <p>Latvia</p> <p>Slovenia</p> <p>UK</p>

Financial Guarantee: WEEE from Private Households

As the WEEE Directive stipulates individual financial responsibility for new WEEE, producers are required to finance the costs of waste management of their own products. Although producers can choose to fulfil their obligations collectively, they are not forced to finance the cost of other producer’s WEEE. Since it cannot be assumed that all producers that are on the market today will remain active on the market when their products are collected as WEEE, a financial guarantee is required so that these costs will not fall on society or other producers.

³ In the Estonian Waste Act, Producers are also responsible for the management of WEEE from their own products for historical WEEE.

Most Member States interpret membership in a collective compliance scheme to be an appropriate guarantee for new WEEE obligations. At the same time, producers that wish to comply individually must either have a blocked bank account or recycling insurance to satisfy the guarantee requirement. In Germany and Italy and possibly Sweden a financial guarantee is required by all compliers. However in Germany the guarantee can be based on a collective guarantee, which means that producers will be responsible for other producers' products in the event that one member exits the market.

The current transposition of many of the MS requires a producer that chooses to set up an own brand or limited brand compliance system to take out recycling insurance or create a blocked bank account as a financial guarantee. Both of these options are presumed to be significantly more costly than joining a collectively-organised compliance.⁴ Meanwhile, producers joining a collective scheme are exempt from their duty of setting aside a financial guarantee in many MS. This would mean more financial burden for producers choosing to set up an individual system or limited brand compliance scheme. Many producers have cited the fact that the added costs of providing a financial guarantee is one of many limiting factors hindering the development of individual or limited brand compliance schemes.

Distance Sellers

In order to avoid that traditional distribution channels have a disproportionate economic burden compared with distance or electronic selling channels, Recital 9 outlines that provisions of the WEEE Directive should equally apply to products and producers irrespective of the selling technique used. The inclusion of distance sellers can be found in the legal text in the Directive specifically in Articles 3(i) on the definition of producers, Article 8(4) concerning financial mechanism and Article 12(1) on information and reporting.

A study commissioned by the Nordic Council of Ministers identified two main patterns or approaches that Member States take when handling the registration of distance sellers selling products to end-users in other EU states. These are as follows:

- Approach 1: Registration of distance sellers in the **sellers'** Member State companies selling EEE by distance to end users in other Member States must register in their home Member State and report the number of products placed on the market in each Member State where products are sold

⁴ In Germany, where there is a legal requirement to provide a financial guarantee regardless of the compliance approach taken, a number of insurance type solutions have emerged that have been developed by industry associations to meet this demand. According to the German producers we interviewed, the size of such insurance is very low. However, these guarantees can only be triggered when the last producer exits the market for a particular product category, making the risks of such an event occurring quite low. One might question the added value of such a guarantee, especially when the primary cost driver for this type of guarantee is related to the administrative coordination associated with the operation of the solution. Moreover, for producers that are placing small volumes of EEE on the market each year, it is often more economical to use a blocked bank account or an annual bank guarantee to manage the liability, as the fixed administration fee makes up the majority of the fee

- Approach 2: Registration of distance sellers in the **end users'** Member State
companies selling EEE by distance to register and report the number of products placed on the market in the Member State where the end users are located.

The results received from national registers indicate that

- 10 Member States apply Approach 1 exclusively,
- 7 Member States exclusively apply Approach 2
- 2 Member States have chosen to combine Approaches 1 and 2,
- 2 MS report that cross-border distance sellers are not required to register.

When particular combinations of approaches are applied distance seller might be **obligated to register in both** Member States where selling from and selling to, or a distance seller **will not be obligated to register** neither in its home Member State nor in the Member State where the end-user is located. These two scenarios are clearly unacceptable outcomes of the lack of a harmonised approach in addressing obligations of cross-border distance sellers.

Allocation of Responsibility of WEEE other than WEEE from Private Households

For historical non-household WEEE, producers are responsible when they supply new products on an old-for-new basis. Producers are responsible for the financing of the costs of collection, treatment, recovery and environmentally sound disposal of WEEE from users other than private households for products placed on the market after 13 August 2005. Producers are also provided the option in Article 9(2) to conclude contracts with end users stipulating other financing methods for new WEEE.

Except for Germany, France and the Netherlands, all MS determined that for historical WEEE, producers are responsible to accept WEEE from end users when purchasing new products. If end users of historical WEEE are not purchasing new equipment the responsibility rests with the end user. However in Germany, France and the Netherlands the end user is responsible for financing all B2B historical WEEE.

For products placed on the market after 13 August 2006⁵, producers have the general obligation in all MS to finance the WEEE from users other than from private households. However, according to Article 9 (2) producers and users other than private households may conclude stipulating other financing methods.

According to Article 8 of the WEEE Directive, a financial guarantee is required to ensure the financing of WEEE placed on the market after 13 August 2005. There is no explicit mention of the requirement for a guarantee for WEEE from users other than private household. However certain some MS have extended the requirement for a financial guarantee for B2B products in addition to WEEE from private households. Due to the differences of the requirements given in relation to B2B and B2C (B2C/B2B split), several issues have been arisen that may impact the implementation practices. They are of special relevance to the

⁵ Dates may vary in certain MS.

so-called dual use products⁶ – products used by both private households and institutional users.

Labelling of EEE – Producer Identification

There are two references in the WEEE Directive, requiring producers to mark their products in order to identify the responsible producer. The first reference is in Article 8(2), where financial obligations for new WEEE are laid down (*'...and that producers clearly mark their products in accordance with Article 11(2)'* (Article 8(2) second paragraph)). From this reference to Article 8(2) it is clear that producer identification is deemed crucial by the legislators in order to facilitate the requirement that producers are responsible to finance the management of WEEE from their own products.

The second and primary requirement is found in Article 11: Information for treatment facilities. Member States shall ensure that any producer of an electrical or electronic appliance put on the market after 13 August 2005 is clearly identifiable by a mark on the appliance. Furthermore, in order to enable the date upon which the appliance was put on the market to be determined unequivocally, a mark on the appliance shall specify that the latter was put on the market after 13 August 2005.

Our analysis of the outcome of Member State transposition on marking for producer identification, points to the finding that 15 out of the 27 apply a national approach to the requirement for the producer to mark products so they can be identified. Austria, Finland, Germany, Spain and the UK take a European approach⁷.

However, important to note is that many Member States clearly refer to either the forthcoming European standard or even refer to EN 50419 or the national equivalent as the standard to be followed by the producer for product identification. Given that in the standard the definition of producer with respect to importing and exporting is defined on the European level, i.e. into a Member State, it is quite possible that this takes precedent over the national definition of producer most often found in the national text.

Problems arise depending on how Member States have interpreted the definition of producer. When the national definition of producer is applied, the identified producer in many circumstances will be the local actor that brings EEE on to the national market. In countries where a manufacturer has no legal operations this is either the wholesaler, distributor or in some circumstances retailers. Accordingly, these actors identified as the producer on the national level are required to mark these products to distinguish themselves as the

⁶ Dual-use products include products such as mobile phones, laptop computers, desktop PC, but may also include refrigerators and stoves that are often found both in work offices and homes.

⁷ Certain Member States have mandated additional marking requirements on products that go beyond requirements of the WEEE Directive and EN 50419:2006. For example, Bulgaria requires that the registration number appear on the product, while Estonia requires that the producers' telephone number, address and registration number are marked on the product. Additionally, Poland requires that producers report the weight of the product in the user manual.

producers. This would ultimately require a re-labelling of the product if the national producers' identity was not printed on the product during the manufacturing process.

In reality, however, this is not common practice within the EEE industry. When speaking with manufacturers and wholesalers during interviews, we have not been made aware of any actors that are re-labelling products. Similarly the brand manufacturers that we spoke with had not mentioned that they had received any requests from customers (distributors, wholesalers or retailers) to re-label their products.

Labelling of EEE - Separate Collection

The requirement of Article 10.3 of the Directive to label products with the crossed out wheeled-bin does not seem to have caused any real concern from actors and does not seem to interfere with the producer responsibility principle as we see it. As found in the transposition of the Directive in national laws, most countries have required producers to label both B2C and B2B EEE with the symbol, even though the measure is seen to be needed due to "a view to minimising the disposal of WEEE as unsorted municipal waste".

Information to consumers

Article 10(1), (2) and (4) of the WEEE Directive requires that certain information should be given to the consumers like the requirement not to dispose of WEEE as unsorted municipal waste and to collect such WEEE separately, the return and collection systems available to them or the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.

What we see in the outcome is that most MS have assigned responsibility to producers (either solely or in combination with retailers) to ensure the information found in Article 10 of the WEEE Directive is provided to users of EEE from private households. Some MS have assigned this responsibility to the compliance scheme, while 2 MS assigned all or partial responsibility to municipalities

Producer Registration & Reporting

Article 12 of the WEEE Directive provides requirements about the producer registers and reporting. It requires to 1. Draw up national registers and to collect information on the amount of EEE put on the market as well as collected, reused, recycled and recovered within the Member State including exports.

By far the largest concern raised by industry stakeholders is the lack of harmonisation between the administrative functions of the national producer

registers. Actors claim that they must adhere to up to 27 varying requirements for reporting.

Reporting Periods (frequency of reporting)

Reporting of products put on the market varies from monthly, quarterly bi-annually to annual reporting periods. Reporting should be frequent enough to deter unscrupulous producers that, for example, may be able to avoid reporting if only present on the market for peak sales periods. Chosen reporting periods may also affect producers in divergent ways due to certain seasonal variations in sales for certain products which might affect when products are most often returned as WEEE.

Criteria to distinguish B2C vs. B2B EEE which will end up as WEEE

Member States have interpreted the Directives' definition of WEEE from private households quite differently, and as a result, varying criteria exist. This lack of a harmonised definition requires producers to ensure that for each Member State the chosen criteria must be determined, leading to potentially unnecessary administrative work to avoid the problems associated with dual-use products.

Definition of "put on the market"

Differences or ambiguities may cause confusion among producers on what sales should be reported in a Member State given that known subsequent intra-community trade will happen. In most Member States, it is when a financial transaction raising VAT occurs that theoretically products are "put on the national market" and sales are required to be reported by the producer who placed those products on the market. Depending on whether the national register allows foreign producers located in another Member State to register or not, the producer may be one of several actors, manufacturer, distributor/wholesaler or even retailer. However, discussions with producers reveals that most manufacturers and large wholesalers/distributors will not report sales on the national market to the register if they know that the client (which may be the legal producer in the Member State) will subsequently ship those products to another market. This makes sense from a producers' perspective, as any sales reported to the national register will be used to calculate its market share.

Reporting Formats

Again due to the diversity of reporting formats industry has complained about the increased administrative burden placed on them to report data to national registers. When reporting the number of products placed on the market, national registers require divergent reporting with respect to the categories of equipment that sales must be reported in. This causes increased administrative

burden and cost, at least when initially setting up internal systems to deal with varying reporting formats.

Lack of common definition of weight

Similar to the above arguments, there is a great deal of divergence between Member States application of the definition of weight causing unnecessary administrative burden. In certain cases, the definition applied in Member States makes it impossible for producers to be able to gather the data from “bill of materials” to accurately report the weight of the product. In this circumstance, when a new product is launched in the market, the producer must physically weigh the product and relevant components in order to fulfil the weight definition. Again, a common definition would reduce this burden considerably and allow rationalisation of the enterprise resource planning software and develop a standard applicable for all products and Member States.

Who can register/report as producer

In most countries it is only legal entities that are based in the Member State where products are placed on the market that are entitled to register as the legally obligated producer. In certain countries, namely Ireland and Austria, an importer (intra community trader) that has placed products on the market can not have his/her legal obligations released, even when the brand-owner of the products is located within the Member State. This creates a situation in certain Member States, where brand manufacturers are not located due to market size, etc., the first importer is most often the producer.

Distance sellers that are based in Member States where they must register in countries where they sell products to end users and sell to end users in countries that only allow nationally based actors to be producers, cannot meet their producer responsibility obligations, and are therefore unwilling free-riders.

Harmonisation efforts

National registers established the European WEEE Registers Network (EWRN). So far the group has been concentrating on establishing contact with all functioning registers and are beginning to address options for registers to harmonise/apply consistent practices on the approach to address a number of key issues.

1.4. Case studies on the implementation of the Directive

As seen the transposition of the WEEE Directive in the national laws differs considerably among the Member States. Some parts of the transposition analysis also revealed the differences in approaches taken by MS to implement

the Directive. Moreover, there are differences in what is happening in practice compared to what the legal text suggests.

Bearing these variations in mind, the implementation of WEEE Directive in selected Member States has been reviewed in depth. The Member States selected represent different patterns of compliance approaches taken by the MS to implement the Directive related primarily to WEEE from households.

Ireland

The Irish implementation of the WEEE Directive, both in terms of the transposition into national law and implementation in practice has been rather successful with respect of meeting the required deadlines and applicable targets of the WEEE Directive. This is especially true considering that there was no pre-existing legislation or comprehensive collection and treatment infrastructure in place before the introduction of the WEEE Directive. The 4 kg/person/year collection target has been surpassed prior to the 31 December 2008 deadline that granted to Ireland due to its lack of recycling infrastructure.

In Ireland, retailers have been allocated a considerably large role in the EPR system through specific provisions in the legal text. Under the definition of producer, retailers are listed as obligated producers if they sell products from producers who are deemed as not to have registered. Moreover, they are not allowed to sell products from entities not registered as producers. This provides a mechanism in which retailers would play an important role in monitoring the registration of producers, and thus would avoid the reduction of free-rider problems.

In addition to the obligation to an in-store take back WEEE on a 1:1 basis retailers have an obligation to take-back WEEE on a 1:1 basis when delivering a product to a household. The fact that retailers are compensated by compliance schemes for their additional responsibilities by being able to retain 20% of the visible fee that is shown to the household purchases of EEE, might help in complying with the responsibility.

The agreement between the 2 compliance schemes, ERP and WEEE Ireland on the geographical allocation of counties in which each is responsible for collection of WEEE from private households appears to be functioning quite well. With the supervision of the Department of Environment, Heritage and Local Government, the groups have been able to agree on the division of geographical responsibilities as well as adjustments to reflect the changing market share obligations of each scheme.

Article 16 makes a clear distinction between the financing mechanism for new and historic WEEE, where for products placed on the market after 13 August 2005 producer are responsible for the financing of waste from their own products. However, under Article 30, producers who are members of an approved body (compliance scheme) are exempt from Article 16 among other,

which may seriously undermine the intention of Article 8(2) of the WEEE Directive, namely individual producer responsibility for new WEEE.

Germany

The German system can be characterised by its competition-oriented compliance approach, driven from the government strong preference to competition over monopolistic compliance schemes. It allocates pickup obligations to producers based on an algorithmic calculation method, coordinated centrally by the EAR Foundation.

When discussing the implications of the implementation of the WEEE Directive in Germany to the producer responsibility principle a number of interesting issues can be highlighted. Regarding the organisation of the national register and clearing house function, it is clear that the German authorities were intent on avoiding any one producer compliance organisation from forming to meet the producer responsibility obligations of producers. The role of the clearing house to allocate WEEE pick-up requests from municipalities to producers based on their current market share is clearly mandated in the national transposition.

Municipalities have been obligated as the main actors responsible for the collection of WEEE from private households and this responsibility is clearly defined in the legal text. Producers are required to finance the provision of the containers and collection, treatment and recycling when assigned a pick-up by the EAR. The functioning of the allocation mechanism has been met with mixed response by producers and municipalities as discussed above. There have been some recommendations put forth to address these issues although no formal process to resolve them has begun.

Municipalities have been given the primary responsibility to provide information to consumers of their obligation not to dispose of WEEE with unsorted domestic waste as well as location of the options available to households to return WEEE. Municipalities are also responsible to inform consumers of EEE of their role in the reuse, recycling and other forms of recovery, including the impacts on the environment and human health from the disposal of WEEE. Producers are responsible for the above information provision “accordingly”. Retailers have not been obligated to provide collection on an 1:1 basis, although they can offer collection on a voluntary basis.

Unlike many MS a financial guarantee is required from all producers and no exemption is provided to producers that are members of recycling consortia. Producers that choose to finance their new WEEE obligations based on their share of the total quantity of EEE per type of equipment placed on the market, are able to provide a guarantee in the form of participation in an appropriate system to fund WEEE. In practice, several guarantee solutions are available on the market today. A closer look reveals that the guarantee can only be triggered when the last remaining producer exits the market in a particular product group. Since the risk is quite low of this taking place the premiums charged are also quite low.

In terms of producer responsibility for new WEEE, the ElektroG provides producers a choice to either finance the WEEE from their own products (through sampling or sorting) or to calculate this obligation based on market share in the same way as historical WEEE. Providing a choice of having a responsibility either individually or collectively for new WEEE varies from the intention of Article 8(2) of the WEEE Directive. The EAR allows producers to deduct any individually collected WEEE from their allocated share of WEEE collected from municipal collection sites.

Lithuania

The approach taken in Lithuania is a representation of the other end of the spectrum within the competing collective system, where management of WEEE is left in the hands of free market. This is to an extent realised via a number of private collectors and service companies having contract with the so-called producer organisation. However, as of spring 2007, there exists only one entity, called “InfoBalt EPA” that has the license to fulfil producers’ responsibility on their behalf.

As mentioned earlier, Lithuania is selected as a representative of a case where compete collective systems work without a strong involvement of coordinating bodies/government authorities. As found in many of the systems that take this approach, the Lithuanian system determines the amount of historical WEEE that producers need to collect and recycle based on the new EEE put on the market each year. In other words, the amount of products that producers must collect does not depend on what is actually coming back to the collection points. It is up to producers or their compliance scheme to achieve the required collection and recycling.

This means on one hand that producers or compliance schemes must compete to collect WEEE that is assigned to them, which would encourage these entities to meet their collection quotas in the least expensive way. On the other hand, the approach may create a situation where it is unlikely that remote areas would be serviced, especially if not mandated by the authorities. Moreover, there is a disincentive for producers and compliance schemes to collect more than their required quotas as any excess would have to be financed by producers, unless the over capacity could be banked by the scheme or sold to other compliance schemes.

By looking into the situation in Lithuania in depth, it turned out that there is only one licensed scheme – InfoBalt EPA – operating in Lithuania at the moment, while the rest of the entities that we considered in the beginning were compliance scheme turned out to be recyclers. Although the recyclers may have direct contract with producers to collect their share of historical WEEE and may compete with InfoBalt EPA on this issue, the research team did not have possibilities to obtain concrete insights on the issue.

However, the situation surrounding the collection of WEEE from households – possibilities for collectors and service companies establishing direct contract with waste generators – tend to suggest the emergency of a fierce competition among the waste collectors/service companies to collect WEEE. This may lead to a situation similar to what has been experienced in the area of municipal waste collection in, for instance, Poland. In Poland, the strong drive towards free market economy affected municipal waste collection system as well. Municipalities must provide license to collect waste to entities provided that these entities fulfil certain criteria prescribed in relevant legislation. This created a situation where a number of waste collection companies operate on the same road without any coordination, obtaining contract with individual households through fierce price competition.

Sweden

Sweden has been selected as an exemplary case representing the situation where a single national collective system for compliance with producer responsibility requirements is the dominant model. Although there are some producers that have developed alternative solutions mainly for WEEE from businesses (although this WEEE is actually B2C according to the interpretation of the EE-Register), most obligated producers fulfil their obligation by being members of EI-Kretsen.

In terms of WEEE collection, the EI-Retur System has achieved the highest rates of collection reported in Europe, with a total of 15.8 kg/capita/year in 2006. EI-Kretsen attributes this success to the level of cooperation between its partners, the municipalities and contractors and the willingness of the public to participate in the separate collection of WEEE. Although there are increased obligations for producers with respect to the allocation of responsibility for collection of WEEE in the new WEEE Ordinance, there has been essentially no change in the allocation of responsibilities in the practical sense. The original agreement between EI-Kretsen and the municipalities was extended until 2010, where producers agree to finance the provision of and collection of WEEE containers at municipal collection sites and municipalities provide the space for storage and acceptance of WEEE from private households.

The need for coordination by a central authority, i.e. in terms of allocation of collection sites for WEEE from household, is limited by the fact that EI-Kretsen is the only compliance scheme operating and it has exclusive access to municipal collection sites. Since at the present time, no other compliance schemes are in operation, there is no need to verify that each scheme is handling the required amount of historical WEEE reflecting the market share of the respective members. This simplifies both the coordination of the collection of WEEE in practice as well (in terms of container provision and pickup scheduling, etc) and the monitoring of producer compliance by the authorities. However, the emergency of the new system may alter the situation.

In the Swedish Ordinance, distributors are not obligated to offer collection of WEEE on a 1:1 basis when supplying new products as collection rates had already exceeded the WEEE Directive targets (without the participation of distributors) at the time of transposition. However, on the Swedish market a new compliance solution is emerging that will most likely use the existing nation-wide network of 2-3 large retailers for its collection network. If approved by the Swedish EPA as a suitable system then there will be an added complexity to WEEE management system in Sweden, most likely requiring the need for a clearing house mechanism.

The Swedish EPA has recently circulated a draft guidance document on what constitutes a suitable financial guarantee under the Ordinance. In addition to stipulating the condition of a recycling insurance, a blocked bank account or an annual bank guarantee, the guidance gives specific criteria for guarantees as membership in collective financing systems. The requirements of this type of guarantee appear to be formulated in such a way that will ensure a level playing field with the other forms of suitable guarantees under the ordinance.

With respect to the formulation of financial responsibilities for WEEE from private households, the Swedish Ordinance clearly defines that for historical WEEE all actors on the market are responsible proportionally at the time when the costs to manage historical WEEE. However, for new WEEE, producers in general seem to be allocated the financial responsibility for their products. There is no explicit mention that each producer is responsible for financing the waste from their own products.

1.5. Options for an amendment of the WEEE Directive

The development of options for an amendment of the WEEE Directive starts at a point where only short term experiences from the implementation of the Producer Responsibility Principle (PRP) of the WEEE Directive are available. Experiences which are available are mostly related to the situation with historical waste and not with future (new) waste.

What is particularly missing are experiences with the inbuilt creativity of the (rapidly developing) new system for the end of life management of EEE as determined by the WEEE Directive and the creativity of the involved players in developing approaches on how to deal best with future waste. The WEEE Directive here gives a framework and in several aspects the details will be completed by the involved stakeholders and especially by the producers and compliance schemes.

To give the system of which the WEEE Directive set the starting point the necessary room for its development a framework is required that supports the inbuilt creative potential for the further development of the PRP in the area of EEE and WEEE and its further transposition into practice by the involved parties. In contrast to this the analysis of the implementation of the WEEE

Directive in the Member States showed that the current situation is characterised by heterogeneity and burdens or disincentives for activities of the involved parties and especially the (responsible) producers to develop optimised solutions.

1.5.1. Designing EPR legislation & programs that increase producer incentives for better product design

EPR programs for EEE manifested as take back and recycling systems should strive to achieve the multiple goals of (1) promoting design improvements of products and (2) high utilization of products material quality through effective collection and reuse or recycling.⁸

While collection targets and recycling targets are key aspects of EPR program design, in this section we focus on the **financial model** as the key incentive to promote design change of products and discuss how variations of the design of the model influence the incentive. Different possibilities exist to **implement individual financial responsibility within collectively organised systems**. We also set up four organizational system alternatives as examples to discuss how different organizational structure may also impact the operational complexities. Under different financial models it is possible to achieve individual financial responsibility both within collectively organized compliance systems and schemes operated by individual producers.

The products covered under the systems discussed in this section include WEEE from private households, including dual-use products in businesses.

Individual financial responsibility can be implemented in EPR programs that are organised in varying ways. Among them, four systems⁹ consisting of collectively organised compliance schemes are provided as examples.

System Design 1: This system design is characterized as having a single compliance organisation or Producer Responsibility Organisation (PRO) that manages the take back and recycling obligations of producers. All active producers are members in the scheme and all collection and recycling infrastructure is coordinated by the scheme. In this case no individual producer collection are recognized towards meeting compliance obligations.

System Design 2: Similar to System Design 1, this system design is characterized as having a single compliance organisation or Producer

⁸ Lindhqvist, Thomas, & van Rossem, Chris. (2005). Evaluation Tool for EPR Programs. Report prepared for Environment Canada and the Recycling Council of Ontario. [On Line]. Available:

<http://www.rco.on.ca/intro/upcoming/conf05/ThomasLindhqvist.pdf>. Goal 2 can be divided into the 3 sub-goals of a). effective collection, b). environmentally sound treatment of collected products and c). high utilisation of products and materials in the form of re-use and recycling.

⁹ The four systems presented here are generic in nature and are by no means exhaustive list of all possible combinations. It should be recognized that in all of these system designs, it should be possible for producers that wish to set up their own individual collection systems for either their own new WEEE as well as a representative share of historical WEEE to do so. However, due to our focus on illustrating that IPR is possible to design within collective systems, we do not discuss systems managed by producers independently here.

Responsibility Organisation (PRO) that manages the take back and recycling obligations of producers. Individual producer collection efforts (own-brand or mixed brand) are counted towards its general obligations under the PRO.

System Design 3: Multiple compliance schemes or PROs operating on a national market (no individual producer collection efforts (own-brand or mixed brand) can be used towards meeting compliance obligations). Producers or their compliance schemes develop collection infrastructure by either contracting directly with municipal collection sites and/or retailers. Allocation of this infrastructure may be done in several ways. This could include allocation of regional areas to compliance schemes, or through the use of an algorithm based formula to assign collection of WEEE from designated collection sites. Managing the allocation process could be the role of a national clearing house or negotiated between the existing compliance systems or negotiated with national authorities, or a combination of the above.

System Design 4: Multiple compliance schemes or PROs operating on a national market and individual producer collection efforts (own-brand or mixed brand) are recognized and are running in parallel.

Financing Models

The five models applied¹⁰ show examples of structuring the financial mechanism used to allocate costs to producers for the management of WEEE. Each model premise is described with its potential impact on new product design incentive. Also presented are the operational requirements needed with respect to new and historical WEEE.

¹⁰ Just as the operational systems, the examples provided here are not exhaustive list of possible models used for EPR programs.

Table 2: Combination of systems and financing model: possibility of creating design incentives and complexity

		System 1	System 2	System 3	System 4
		Single PRO	- Single PRO & Individual systems (own-brand or mixed in parallel)	Multiple PRO	Multiple Pro & Individual systems (own-brand or mixed in parallel)
Financing Model A: PAYG (historical and new) Current waste management costs within a product category or treatment category are divided among producers proportionate to their market-share (by weight placed on the market)	Design incentives	low	low	low	low
	Coordination between systems	no	low	medium	medium
	Required distinction within product groups	none	none	none	none
Financing Model B1: Return-share (historical and new); Current waste management costs of producers divided among producers proportionate to the weight or number of their own-branded products returned	Design incentives	medium	medium	medium	Medium
	Coordination between systems	no	low	medium	medium
	Required distinction within product groups	brand	brand	brand	brand
Financing Model B2: Return-share (historical and new); Current waste management costs of producers divided among producers proportionate to the weight or number of their own-branded products returned. For both new and historic WEEE costs are differentiated based weight returned and for new WEEE on inherent properties of returned products.	Design incentives	high	high	high	high
	Coordination between systems	no	low	medium	medium
	Required distinction within product groups	-brand - properties - historic & new	-brand -properties - historic & new	-brand - properties - historic & new	-brand -properties - historic & new
Financing Model C1: (PAYG: historical, Return-share (new))	Design incentives	medium	medium	medium	medium
	Coordination between systems	no	low	medium	medium
	Required distinction within product groups	-Brand - historic & new	-Brand - historic & new	- brand - historic & new	- brand - historic & new
Financing Model C2: PAYG (historical, Return-share new)	Design incentives	high	high	high	high
	Coordination between systems	no	low	high	high
	Required distinction within product	-brand - properties - historic	-brand -properties	-brand - properties - historic	-brand - properties - historic &

		System 1 Single PRO	System 2 - Single PRO & Individual systems (own-brand or mixed in parallel)	System 3 Multiple PRO	System 4 Multiple Pro & Individual systems (own-brand or mixed in parallel)
	groups	& new	- historic & new	& new	new

The alternatives are, in light of on-going efforts of producers, highly feasible.

In terms of providing incentives for design change Financing Model B2 and C2 has the potential to provide the greatest incentives for producers to redesign products for improved end-of-life management. At the same time it is the most complex to operate.

Given that sorting or sampling of WEEE is required to determine the relative share of new and historic WEEE as well as return-share is needed, it would be less complex to implement in Systems 1 or 2. Since there is only one PRO that is in operation in these models, WEEE collection is handled by one system. Therefore all sorting or sampling at collection sites to determine brand-share of new WEEE is less complex to manage.

In Systems 3 and 4, WEEE sorting and/or sampling must be done for each PRO since mixed brands are collected all collection sites operated by the numerous PRO's. Information sharing between the systems would be necessary to determine the return-share of each producer's new WEEE. This is more administratively complex. Alternatively a national clearing house could take a representative sample of the entire country and assign return-share proxies to each producer. Each system would be responsible for managing the WEEE of its total membership.

1.5.2. Options for an amendment of the WEEE Directive

Based on the analysis of the implementation of the WEEE Directive in the Member States and taking into account positions of stakeholders options for the future development of the legal framework for WEEE have been identified. The basic elements are described in the section below.

Article 8.2 of the WEEE Directive provides that for "future waste" producers can chose whether they want to fulfil their responsibilities individually or collectively. According to our analysis and the statements of the stakeholders the provisions of the Directive are sufficient to ensure that a producer can choose to join a collective system or to run his own system. Whichever way he chooses, for "future waste" every producer should be required to pay only for the costs of recovery of his own products. Ensuring proper implementation of the existing provision of Article 8.2 provides an adequate framework for the development of potential individual approaches. No amendment of the Directive is proposed here but as shown in the analysis of the implementation there is a strong need to ensure full implementation of the provisions.

Financial guarantees: Presently no harmonised situation is in place regarding the financial guarantees for the future recovery of WEEE. Basically the level of security for financing of future waste shall be same for individual and collective systems.

Costs for collection: In a number of Member States a producer that runs an individual system does not have the same advantages of publicly financed collection as collective systems (involvement of municipal collection points). A level playing field and a harmonised implementation of financial and physical responsibilities is the basic element of this option.

Harmonised definitions: Definitions that have relevance for EEE (like the term “producer” or “put on the market”) shall be harmonised in the Directives. The basis for this harmonisation can be the outcome from the legislative process based on Commission Proposal on a common framework for the marketing of products¹¹ where definitions for different kind of economic operators are given in Title II Chapter 1 Article 6.

Harmonised standards: Registration procedures in the Member States shall be harmonised in a way that the same set of information is requested and the same definitions apply. The requirements shall be elaborated and published in the form of a European Standard and comprise at least the following elements:

- registration procedures and forms
- reporting
- application of the distinction between b2b and b2c
- definition of weight
- reporting by distance sellers

The WEEE Directive then shall require the application of this standard in all MS.

European Clearing House Mechanism: The Producer Responsibility Principle of the Directive connects the product/the production phase with the End of Life (EoL) phase. While products and producers are not constricted by national territories as waste related legislation and enforcement practices are, a need for certain supra-national approaches evolve e.g. regarding coordination of national activities, cross-border payments and waste flows and uniform enforcement of certain requirements in the EU. However, supra-national institutions with such a profile do not yet exist and the legal situation of the European Union does not make it likely that this could be established in a short term perspective.

The development of options takes this into account by proposing a network of national institutions (for supra-national communication and coordination). European clearing house mechanisms and communication between national Clearing Houses is performed in this option by the nationally located institutions.

This supra-national element of the implementation of the WEEE Directive can be combined with other elements that are not restricted to national borders like for example European Standards regarding technical and organisational requirements (see above option on harmonised definitions).

¹¹ 2007/0030 (COD); COM(2007) 53 final, Brussels, 14.2.2007

European register and clearing house: In contrast to the option “European Clearing House Mechanism” producers can register at and report in this option to a central European institution. National enforcement of waste related questions still exist.

1.6. Impact assessment

The Impact assessment identified and assessed the potential measures for improving the operation of the producer responsibility obligations under the WEEE Directive that were outlined in Section above. The measures are organised into two broad groups:

- **harmonised definitions and approaches** - addressing areas of variation in the national implementation of the WEEE Directive, which mean that the principle of producer responsibility is not effectively applied and/or that unnecessary administrative burdens are placed on the EEE industry sector; and
- **a supra-national approach** - addressing the issue of cross-border trade within the EU and the associated difficulties with ensuring the correct application of producer responsibility obligations.

The measures, which are assessed individually according to the Commission’s impact assessment guidelines. Then these measures are grouped into Scenarios (as defined in the Project Specification) to illustrate the impacts of groups of measures.

1.6.1. Harmonised definitions and approaches - Potential Measures

Five measures have been considered in this Report:

- **Measure 1:** the ‘do nothing’ measure, which essentially provides the baseline against which the other measures can be assessed.
- **Measure 2:** harmonise the requirement for financial guarantees so that membership of a collective scheme is **not** considered to be a financial guarantee and each individual producer pays a guarantee.
- **Measure 3:** harmonise the requirements for financial responsibility so that all producers have to pay for the collection of WEEE by municipalities.
 - **Measure 4:** harmonise the definitions of ‘producer’ and ‘put on the market’, key terms according to the ‘Common framework for the marketing of products’,
- **Measure 5:** develop European standards (through CEN) to harmonise the procedures for registration and reporting, including reporting periods, the application of the distinction between B2C and B2B WEEE, the definition of weight and reporting by distance sellers.

Table 3 sets out the actions required by the key stakeholders under each of the different measures. Note that each measure is assumed to be independent of the others.

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Table 3: Actions Required by Stakeholders

Stakeholder	Measure 1 (Baseline)	Measure 2 (Harmonise Financial Guarantees)	Measure 3 (Harmonise Costs of Collection)	Measure 4 (Harmonise Definitions to Common Framework)	Measure 5 (Harmonise Definitions by Standards)
Producers Guarantees	Membership of a collective scheme is considered to be a financial guarantee in 18 MS; other arrangements are in place in the remaining 9 MS	Each producer has to pay a financial guarantee regardless of membership of a collective scheme	Membership of a collective scheme is considered to be a financial guarantee in 18 MS, other arrangements are in place in the remaining 9 MS		
Financial responsibility for B2C collection costs	Producers and/or distributors pay costs of B2C collection in 19 MS	Producers pay costs of B2C collection in 27 MS, except where taken back to distributors	Producers and/or distributors pay costs of B2C collection in 19 MS		
Importers	Companies importing into individual MS are generally considered to be the 'producer' for the purpose of the national WEEE legislation			Only companies importing products into the Community are considered to be the 'producer'	Companies importing into individual MS are generally considered to be the 'producer' for the purpose of the national WEEE legislation
Reporting	Different reporting requirements exist in each MS, requiring producers to be familiar with a number of sets of requirements and to prepare different 'types' of report for each MS				Stakeholders should participate in the development of CEN standards A single 'type' of report is required by all MS, but must be submitted to each MS individually
Authorities Financial responsibility for B2C collection costs	MS pay costs of B2C collection in 7 MS	MS may have physical responsibility for WEEE collection but not financial responsibility	MS pay costs of B2C collection in 7 MS		
Reporting	Current actions not affected				Stakeholders should participate in the development of CEN standards

1.6.2. Supra-national Approach - Potential Measures

Three measures are considered in this Report:

- **Measure 1:** the 'do nothing' measure, which essentially provides the baseline against which the other measures can be assessed.
- **Measure 6:** creation of a European Clearing House for WEEE producer responsibility. This specifically refers to a formalised (electronic) network of national institutions across the EU-27, which will allow for supra-national communication about the registration of producers and the amount of EEE put on the market.
- **Measure 7:** a variation of the European Clearing House system, in which a European producer can register with a national register in a single Member State, with the registration, reporting and fees reflecting its activities across all other Member States. In this system, a supra-national communication system will be required for:
 - exchange of information about the registration of producers and the amount of EEE put on the market; and
 - the transfer of money and/or obligations related to cross-border transfers of products or WEEE.
- **Measure 8:** establishment of a harmonised EU register of producers, which will serve mainly as a framework for information exchange and transfer of obligations. Under this Measure:
 - the registration of producers and the allocation of responsibilities to producers will be undertaken at the EU level, rather than at a national level as under Measures 1, 6 and 7;
 - data relating to the amounts of EEE placed on the market will be collected at EU level, with the data then differentiated by Member State;
 - national organisations will be responsible for money transfers relating to cross border transfers of products or WEEE and there will be communication between the EU Register and national institutions relating to the registration of producers and the amount of EEE placed on the market in each Member State; and
 - reporting on collection, recycling and recovery targets will be at the Member State level.

In practice, Measure 8 is likely to require the establishment of a physical structure at a given geographical location, while Measures 6 and 7 require only the establishment of an electronic network. However, it is possible that both approaches could be put in place simultaneously.

Table 4 sets out the actions required by different stakeholders under each measure.

Table 4: Actions Required by Stakeholders

Stakeholder	Measure 1 (Baseline - National Approach)	Measure 6 (EU Network of MS)	Measure 7 (EU Registration at one MS)	Measure 8 (EU Register/Institution)
Producers <i>Registration</i>	Each 'producer' must register in each MS where it sells EEE		Each producer registers with one MS and is deemed to meet requirements for all MS	Each producer registers at EU level (and the data is then sent to the individual MS)
Importers	Importers, distance sellers and/or distributors are likely to be obligated as 'producers'		Importers and distance sellers (acting within EU) and/or distributors are unlikely to be obligated as 'producers'. General issues relating to distance selling and movement of second-hand goods are also likely to be addressed (and possibly eliminated) by these measures	
Guarantees	Financial guarantees are paid in each MS where products are 'placed on the market'		Financial guarantees are paid in one MS only	Financial guarantees are paid at EU level
Sales Data	National sales data are reported to each MS individually		Sales data for all MS are reported to one MS only and can be requested from this MS by other MS	Sales data for all MS are reported at EU level (and the data is then differentiated according to MS)
Other data collection	Data on collection, recycling and recovery are reported to each MS individually		Data on collection, recycling and recovery for all MS are reported to one MS only	Data on collection, recycling and recovery are reported to each MS individually
Authorities (MS) <i>Reporting</i>	All 'producers' buying and/or selling EEE in a given MS report directly to national authorities or institutions		Only producers manufacturing EEE in a given MS will report to the national register in that MS	All 'producers' buying and/or selling EEE report directly to the EU Register
Money Transfer	Money transfer relating to cross border transfers of products or WEEE is not currently possible	Money transfer relating to cross border transfers of products or WEEE could be undertaken between national institutions (mechanism yet to be developed) MS which import EEE (or WEEE) after it has been placed on the market in another MS can request information and money to finance WEEE from the exporting MS MS which export EEE (or WEEE) after it has been placed on the market must respond to requests for information and money from the importing MS	Money transfer relating to cross border transfers of products or WEEE will be undertaken between national institutions Exporting MS are required to transfer producer and sales information and money to finance WEEE to all other Member States	Money transfer relating to cross border transfers of products or WEEE will be undertaken between national institutions
Enforcement	Registered companies are within Member State's legal jurisdiction - MS must enforce national WEEE requirements		Registered producers may be outside Member State's legal jurisdiction - each MS must enforce WEEE requirements on behalf of other MS	Each MS must enforce WEEE requirements on behalf of the European Institution (as it communicates this to them)
Funding	Member States currently incur their own costs	The Commission will have to facilitate (and fund paid from registration fees by producers?) the development of a	Member States will continue to incur their own costs for running the system	The Commission will have to facilitate (and fund paid from registration fees by

Stakeholder	Measure 1 (Baseline - National Approach)	Measure 6 (EU Network of MS)	Measure 7 (EU Registration at one MS)	Measure 8 (EU Register/Institution)
		network of national administrations		producers?) the development of a centralised institution

1.6.3. Impact of Individual Measures

Table 5 provides a summary of the impacts discussed in the previous Sections. The combined values of '+' and '-' cannot be taken to represent an actual economic value of the Measure, but reflect the relative merits of different options.

Table 5 Summary of the Impact of Measures

Measure	Businesses (general)	SMEs	Competent Authorities	European Commission	Consumers	International Stakeholders	Environment	Total
1: Baseline	0	0	0	0	0	0	0	0
2: Financial Guarantees	- €8.5 b to - €39.8 b		- €52 m	0	N/V	0	N/V	- €8.5 b to - €39.8 b
	-14	-3	-3	0	-5	0	+1	-16
3: Financing B2C Collection	- €448 m to - €1.4 b		+ €448 m to + €1.4 b	0	0	0	0	0
	0	0	+2	0	0	0	0	+2
4: Harmonised Definitions	N/V	N/V	N/V	0	0	N/V	N/V	N/V
	+14	+4	+1	0	0	+1	+2	+22
5: Harmonised Standards	N/V	N/V	N/V	0	0	N/V	0	N/V
	+20	+5	0	0	+1	+1	0	+21
6: Formal Network	N/V	N/V	- €17 m	- €0.4 m to - €0.8 m	N/V	N/V	N/V	- €17 m to - €18 m
	0	0	-2	-2	-1	-1	-2	-7
7: Network + Single Registration	+ €226 m to + €276 m		+ €128 m to + €150 m	- €16 m to - €66 m	N/V	N/V	N/V	+ €289 m to + €410 m
	+17	+4	+1	-2	+2	-1	+2	+17
8: EU Register	+ €226 m to + €276 m		N/V	N/V	N/V	N/V	N/V	N/V
	+16	+4	-1	-4	+2	+2	+2	+15

Note: values in italics are not included in totals to avoid double counting

1.6.4. Analysis of Scenarios

This Impact Assessment has examined a number of measures which are intended to improve the operation of the producer responsibility obligations under the WEEE Directive.

These measures have been grouped into the following scenarios, based on the requirements of the Specification:

- Scenario 1: Maintenance of the Status Quo - baseline scenario;

- Scenario 1A: Improvements in National Implementation - Harmonised Definitions and Procedures;
- Scenario 1B: Improvements in National Implementation - Harmonised Approaches;
- Scenario 2: Creation of a European Clearing House; and
- Scenario 3: Establishment of a Harmonised Framework.

Table 6 shows how the measures discussed above are combined into these Scenarios. Indicative costs of the scenarios are provided; however, care should be given to avoid double-counting of impacts. For example, Measures 7 and 8, which include single registration, will achieve many of the benefits obtained from Measures 4 and 5 relating to harmonisation. Therefore, the scenarios which combine these Measures could double-count some of the benefits associated with reduced administrative requirements.

Table 6: Combination of Measures for Each Scenario

Measure	Scenario 1 (Status Quo)	Scenario 1A (Harmonised Definitions and Procedures)	Scenario 1B (Harmonised Approaches)	Scenario 2 (Creation of a European Clearing House)	Scenario 3 (Establishment of a Harmonised Framework)
Summary of Impacts	Status quo	Major benefits for businesses, some benefits for other stakeholders. Few costs.	Major benefits for businesses but also costs, which may be passed on to consumers. Some costs and benefits for public authorities. Some environmental benefits	Significant benefits for businesses with potential savings for consumers. Major costs incurred by public authorities. Some environmental benefits	Significant benefits for businesses with potential savings for consumers. Significant costs incurred by public authorities. Some environmental benefits
Indicative costs/benefits	0	Benefits likely to be 100s of million € due to reduced administrative burden	The cost of individual guarantees would exceed the benefits obtained from other Measures. The costs of collective guarantees would exceed the benefits to a lesser extent.	Benefits likely to be 100s of million € due to reduced administrative burden	Benefits likely to be 100s of million € due to reduced administrative burden but may be exceeded by unquantified costs.

The Scenarios have been compared against the problems and issues identified relating to the implementation of the producer responsibility obligations under the WEEE Directive in order to determine which one provides the most benefits to all stakeholders.

Scenarios 1a and 1b may appear to be easiest to implement, compared with Scenarios 2 and 3. These Scenarios do not address:

- cross-border trade within the EU (second-hand goods and distance selling);
- duplicated actions and free-riders;
- the obligation of actors to fulfil the administrative/financial responsibility of the producer (e.g. improve product design (as foreseen by the Directive));
- an unnecessary administrative burden placed on the EEE industry sector; and
- co-ordination of national activities (including cross-border payments and waste flows) and uniform enforcement.

By incorporating some of the measures required under Scenarios 1a and 1b, Scenarios 2 and 3 both meet all the aims of improving the Directive. However, while Measure 8 is likely to deliver significant benefits - particularly in terms of harmonising the internal market, enforcement and reducing administrative burden - the costs of Measure 8 (under Scenario 3) are likely to be significantly greater than those for Measures 6 or 7 (under Scenario 2). On this basis, Scenario 2 is considered as the option most likely to deliver the aims of improving producer responsibility obligations under WEEE. In addition, while Measure 6 may be potentially easy to set-up and operate compared with Measure 7, the benefits of Measure 7 are considered to be significant enough to merit further consideration as the more appropriate option.

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Table 7: Benefits of the Scenarios

Aims of Improving Directive	Actions to improve operation of producer responsibility obligations under WEEE														
	Sc 1	Scenario 1A		Scenario 1B				Scenario 2				Scenario 3			
	Measure 1	Measure 4	Measure 5	Measure 2	Measure 3	Measure 4	Measure 5	Measure 4	Measure 5	Measure 6	Measure 7	Measure 4	Measure 5	Measure 6	Measure 8
Ensure that the principle of producer responsibility is effectively applied	0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Addresses areas of variation in the national implementation of the WEEE Directive	0	✓	✓	✓	✓	✓	✓	✓	✓	x	x	✓	✓	x	✓
Addressing issue of cross-border trade within the EU (second-hand goods and distance selling)	0	x	x	x	x	x	x	x	x	✓	✓	x	x	✓	✓
Avoids duplicated actions and free-riders	0	x	x	x	x	x	x	x	x	✓	✓	x	x	✓	✓
Clarifies the obligation of actors to fulfil the administrative/financial responsibility of the producer (e.g. improve product design (as foreseen by the Directive))	0	✓	x	✓	x	✓	x	✓	x	x	x	✓	x	x	x/✓
Avoid variation in costs incurred by actors in different countries	0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Removes unnecessary administrative burden placed on the EEE industry sector	0	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ensure co-ordination of national activities (including cross-border payments and waste flows) and uniform enforcement	0	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

