COMMISSION OF THE EUROPEAN COMMUNITIES

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COMMISSION STAFF WORKING PAPER

accompanying the

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on waste electrical and electronic equipment (WEEE)

(recast)

Summary of the Impact Assessment

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SUMMARY

1. Introduction

The WEEE Directive aims to tackle improper treatment of waste electrical and electronic equipment (WEEE). This is the fastest growing waste stream in the EU, producing 8.3-9.1million tonnes in 2005, growing to 12.3 million tonnes of WEEE by 2020.

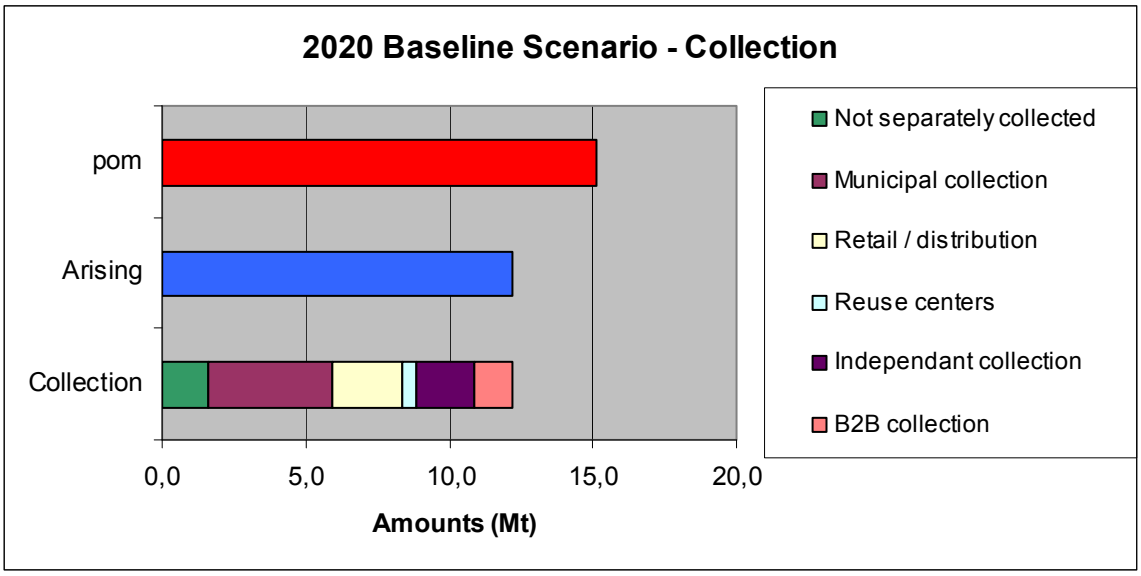
Experience with the Directive, gathered from stakeholders and Member States during a 3 year review, points to the Directive not working as **effectively** as intended and problems with its **efficiency** in achieving its objectives - there are some unnecessary costs.

2. Problems with the Effectiveness

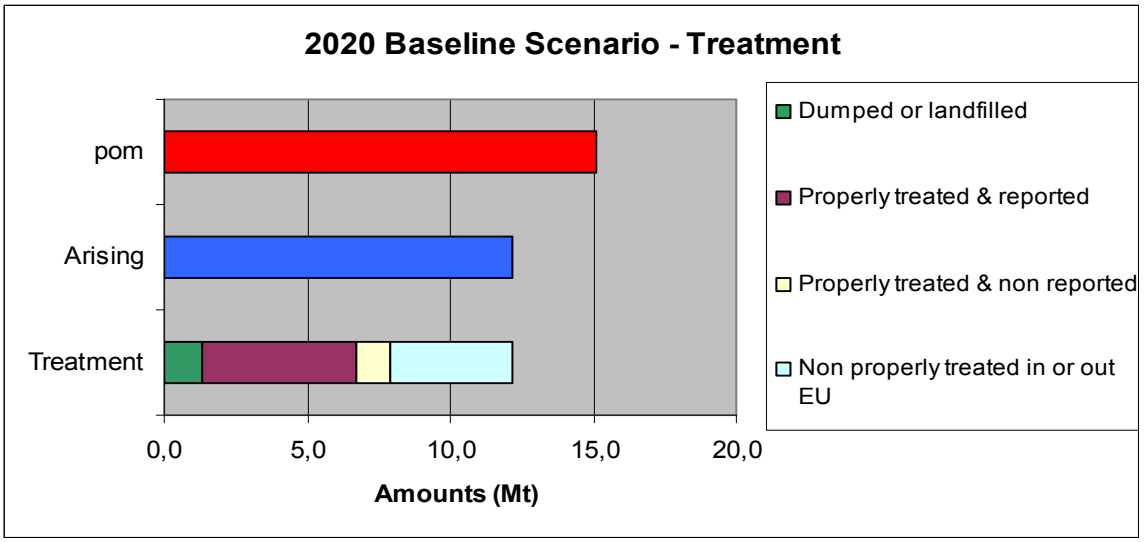
There have been significant changes in the patterns of collection and disposal since the WEEE Directive came into force: the combined effect of higher global metal prices and stimulation of organised collection by the WEEE Directive have resulted in high amounts of WEEE being collected separately from domestic waste, with only an estimated 13% of WEEE going to landfill or incineration.

The indications are that there is separate collection over 85% of WEEE arising, even though only 33% is officially reported as 'separately collected'. A large part of the unreported, but collected, WEEE may either be treated in the EU without due environmental care or illegally shipped to developing countries where parts of the valuable material are recycled in ways dangerous to the health and environment, or dumped.

Based on current practice, this problem will grow rather than diminish, with an estimated 4.3 million tonnes improperly treated each year by 2020, increasing from 3.4 million tonnes in 2005. The predicted destination and collection of WEEE in 2020 is estimated below[1]:



[1] pom = put on the market; Arising = amounts of EEE arising as waste in a certain year.



Environmental Issues

When WEEE is treated in the EU without proper procedures, environmental harm arises, in particular from release of heavy metals like mercury from compact fluorescent lamps and flat-screens, and lead from TV's. Cooling and freezing equipment will release an average of over 6,720 tonnes ozone-depleting greenhouse gases annually over 2011-20 causing climate damage monetised at around €1bn each year.

In developing countries improper treatment and dumping of waste, is a health problem, with both adult and child workers being exposed to highly toxic substances whilst extracting valuable materials from WEEE with no health or environmental procedures. Recycling procedures that do not use best practice waste recyclable precious metals and plastics with knock-on energy use and environmental harm from production of virgin material.

Economic and Social Issues

WEEE itself is an economic resource, with material value currently estimated in the order of magnitude of €2 bn a year. Whilst the economic costs for society of collection, disposing of and treating WEEE are estimated to increase to €5.6bn a year by 2020, including activity by public and informal sectors. With most of this activity taking place in the EU, this waste management activity brings revenue and employment to a waste treatment sector employing much manual labour.

3. Main Problems with the Efficiency of the Directive

Of the unnecessary costs identified in the operation of the Directive the most significant come from uncertainty on the scope of the Directive and requirements for producers to register and report in each Member State they sell in. Specific activity required by business from these, and other avoidable administrative costs are estimated at €66m /year using the EU's standard cost method. These are set to continue. Differences in implementation practice on registration also lead to unwanted free-riding by distance-sellers, who pass their costs on to registered producers.

4. Options assessed

To tackle problems with Effectiveness:

Option 1: Take no action

Option 2: Minimum inspection and enforcement requirements for treatment of WEEE

Option 3: Minimum inspection and enforcement requirements for waste shipment

Option 4: Increase collection target to align with quantities collected already (85% of WEEE arising), make producers responsible for this target, and include B2B equipment in the scope of the collection target;

Option 5: Set collection targets for the environmentally most relevant streams;

Option 6: Change the method of setting the target from kg/inhabitant to a % of the quantity of EEE put on the market in preceding year.

To tackle problems with Efficiency:

Option 1: Take no action

To clarify scope and categorisation (alternatives):

Option 2: Clarify the scope using fixed lists

Option 3: Define the WEEE scope under the RoHS Directive

Option 4: Classifying categories of equipment as WEEE from private households or B2B

To cut administrative burden from registration and reporting (alternatives):

Option 5: Inter-operability of national registers and harmonisation of reporting requirements

Option 6: EU operated Register

There are also 2 other options presented with smaller impacts: to include re-use within collection targets (Option 7); and to set targets for the proportion of each tonne of medical equipment that is to be recycled and recovered as already in place other categories of WEEE (Option 8).

5. Impact Analysis and Comparison of Options

The following table gives a summary of impacts of options for effectiveness

Option			No change (Option 1)	Greater Enforcement (Options 2&3)	85% Collection Target (Option 4)	Specific Targets (Option 5)
Destinations (% WEEE)	Landfill and Illegal Disposal		11	11	11	11
	Treatment in line with Directive		54	59	85	60
	Improper Treatment		35	30	4	29
ANNUAL COSTS	Gross Total Costs (€)		5.6bn + enforcement	6bn – 6.3 + basic enforcement	6.8bn + basic enforcement	6.5 - 6.8bn + basic enforcement
	Collection & transport		1.8bn	1.8bn	1.8bn	1.8bn
	Additional costs		0.9bn	0.9bn	1.1bn	1.1bn
	Basic Treatment		1.3bn	1.3bn	1.3bn	1.3bn
	Additional Treatment to meet legal standards		1.6bn	1.8bn	2.6bn	2.2bn
	Enforcement Costs		Not known to Commission	Increase estimated between 0.2 - 0.5bn	No increase	An increase, perhaps 0.1 - 0.3bn
ANNUAL BENEFITS	Value of Material Recovered (€)		2.2bn	2.2bn	2.2bn	2.2bn
	Environmental Damage	General	Baseline: Ozone depletion from 6720 tonnes of ODS released. Climate Damage of €1bn	Some reduction of climate damage possible; not quantifiable	Dependent on entry date of targets: Climate Damage reduced by €2bn-0.2bn/yr. Ozone depletion reduced by 12000-1200 tonnes.	Dependent on entry date of targets: Climate Damage reduced by €2bn-0.2bn/yr. Ozone depletion reduced by 12000-1200 tonnes.

		In or out EU	Assumed 4,3 million tonnes treated improperly in our outside the EU	Assumed 3,7 million tonnes treated improperly in our outside the EU	Assumed 0,5 million tonnes treated improperly in our outside the EU	Assumed 3,5 million tonnes treated improperly in our outside the EU
	Innovation and Export Markets		Little additional stimulus for development of sorting and recycling technologies	Small stimulus for technology development in a growing global market	Significant stimulus for technology development in a growing global market	Some stimulus for technology development in a growing global market
	EU Employment		Baseline: Estimated number of jobs in EU treating WEEE about several ten thousands	Small increase in EU manual work, with estimated waste industry revenue increase €0.1bn	Greater EU high tech and manual work, estimated waste industry revenue increase €0.6bn	Higher EU high tech and manual work, estimated waste industry revenue increase €0.4bn

6. Comparison of Options to improve Efficiency:

Clarifying Scope and Categories

Of the two options to provide greater clarity on the scope of and categorisation in the WEEE Directive, there is little difference between the impacts; both will provide greater legal precision on the scope and both would require publication of lists, either by Member States or the Commission of the products considered within the scope. Neither option would resolve any new uncertainties about new products which were not clearly inside or outside the scope.

If there was any support expressed for using lists to clarify the scope, then stakeholders supported the idea of having a positive and a negative list. Harmonising the scope under WEEE was supported rather than defining the scope under RoHS, however, this would require introducing a double legal basis in the WEEE Directive whereas a similar effect can be reached by referring to the scope in RoHS, already targeting harmonisation of scope.

The categorisation of certain categories of products as business waste would avoid problems of 'dual use' waste, when where business equipment very similar to consumer equipment (like IT equipment) enters domestic waste and its treatment paid for by producers of domestic equipment. This 'free-riding' would be likely to be more common if greater volumes WEEE were formally collected.

Cutting unnecessary administrative costs from Registration and Reporting

Three options are considered to cut the unnecessary costs from duplication and differences in registration and reporting by producers. Either the introduction of an EU Clearing House or single EU register would certainly provide the functions required for cutting the unnecessary costs: the single EU register would do so at much greater cost to the European Commission (and so taxpayer) with some benefit from reduced costs of operations by Member States. Introduction of legal requirements for interoperability of Member State registers stands a good chance of achieving the same result for producers registration, avoids the need for extra resourcing for the European Commission, but is unlikely to provide services for reconciling flows of funding for treatment between schemes with actual cross-border treatment of WEEE.

7. The Recommended Set of Options and the Impacts

The analysis in this IA recommends the adoption of a combination of options to improve the effectiveness and efficiency of achievement of the WEEE Directive's existing objectives. These options are described with the key impacts in the table below:

Recommended Policy Options	Key impacts (compared to baseline)
To Improve Effectiveness	
Set collection targets for producers at levels close to the level of collection currently being undertaken, include B2B waste in those targets.	- Additional treatment costs of €1bn per year, of which a significant but unknown proportion are increased revenues for EU treatment business. - These costs fall on producers who will be able to pass these on to consumers
Base these targets on levels of EEE put on	

the market in the preceding year, at 65% of EEE put on market for all Member States (85% of WEEE arising)	- Annual reduction of environmental harm to the atmosphere (of magnitude €1bn per yr) up to 2020, EU localities and to workers in developing countries from safer treatment of 4.3million tonnes of WEEE.
Set minimum requirements for inspection and enforcement by Member States, with those requirements decided in Comitology	
To improve efficiency	
Define the scope of the Directive in the RoHS Directive (based on Article 95 of Treaty) and Require Member States to publish the list of products within the national scope	Increased, but not total, clarity on the scope of products, with the possibility for Member States to expand the scope in their territory.
Require interoperability and data-transfer between Member State producer registers	- Cuts unnecessary costs paid by producers of €66million a year, by allowing one registration for all EU obligations, with harmonised requirements for reporting and processes, of which SME's will have the biggest proportional benefit.
Include reuse of whole appliances in the target for recycling combined with reuse.	Removes disincentives for re-use of products, where that re-use is more economically valuable than recycling
Set targets for medical equipment (cat. 8) equipment to the level of those for monitoring equipment (cat. 9)	Small: for some Medical Equipment (perhaps 10,000 tonnes/year slightly greater shares of materials will be recovered.

Compared to other possible options, this set of options:

- Is the most likely to stimulate proper treatment of all WEEE arising outside the domestic waste stream, but not impose extra collection costs on society and may improve the cost-effectiveness of the current Directive;

- Is expected to lead to additional benefits from innovation and exports, with greater investment in recycling technologies supporting technology firms in a fast growing export market where EU firms are often the global leaders, offering expansion of high-tech jobs in this sector, in addition to reducing costs and opening new material markets;

- Is predicted to increase jobs further in the WEEE treatment and recovery sector in the EU – these are frequently manual jobs available for lower skilled sectors of the workforce. Some stimulation of the reuse sector should also lead to more jobs for socially disadvantaged people and also to better access to cheaper second-hand consumer goods for the poorest sector of society.