

Summary: Intervention & Options

Department /Agency: Defra	Title: Impact Assessment of proposed changes to the rules on accreditation of exporters under the Packaging Regulations	
Stage: Final	Version: 0.2	Date: 02 June 2008
Related Publications: Producer Responsibility Obligations (Packaging Waste) Regulations 2007; Directive 2004/12/EC (amending Directive 94/62/EC on packaging and packaging waste).		

Available to view or download at:

<http://www.defra.gov.uk/environment/waste/topics/packaging/index.htm>

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What is the problem under consideration? Why is government intervention necessary?

Exporters are finding it difficult to obtain evidence of “broadly equivalent” status from overseas reprocessors, which is required under the UK Packaging Regulations for exporters to be accredited. In the absence of accreditation, exporters still ship waste metal packaging to appropriate reprocessing sites outside the EU, but this material cannot be counted towards the UK’s packaging recycling targets. This places the achievement of the Packaging Directive’s recycling target for metal at risk, as the UK cannot meet this target without export. In 2006, 50% of the recycling evidence for steel packaging was generated from export; the figure for aluminium was 23%.

What are the policy objectives and the intended effects?

- 1) to facilitate the achievement of the recycling targets for 2008 and subsequent years for waste metal packaging - thereby avoiding infraction - by making sure that as much of the material reprocessed in facilities outside the EU which operate under “broadly equivalent” standards as possible can be counted against the UK target;
- 2) to keep the cost of compliance for metals packaging producers to a manageable level;
- 3) to safeguard the environmental standards enshrined in Article 6(2) of the Packaging Directive.

What policy options have been considered? Please justify any preferred option.

The preferred option is to amend the Packaging Regulations to give Environment Agencies more discretion over what constitutes ‘sound evidence’ that the metal will be reprocessed under broadly equivalent standards. An option to provide a different type of evidence of BE standards, alongside site-specific accreditation, would constitute more proportionate regulation.

Other options include keeping the current requirements and providing a list of accredited reprocessors (both assessed below).

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? The policy will be reviewed in Q1-2 2009 to establish whether the UK met the EU Directive targets, and at the same time every year thereafter as part of target monitoring.

Ministerial Sign-off For consultation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

..... Date:

Summary: Analysis & Evidence

Policy Option: Do nothing

Description: No change to the way exporters get accreditation + development of an accredited reproprocessors' list

COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' Compliance costs for packaging producers with a steel obligation could rise by up to £51m per year, and up to an estimated £5.6m for those with an aluminium obligation. Admin costs to exporters estimated at £0.7m
	One-off (Transition)	Yrs	
	£ 0	0	
	Average Annual Cost (excluding one-off)		
£ 55.9-56.9m	3	Total Cost (PV) £ 163m	

Other **key non-monetised costs** by 'main affected groups' the steel drum industry may be disproportionately affected, as many of them operate at extremely low margins, and a significant increase in compliance costs would mean some of them could go out of business

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' Potential increase in revenue of up to £24m for UK steel reproprocessors and £3.4m for aluminium reproprocessors, assuming there are no substitution effects. Potential increase in revenue for steel exporters of up to £18.9m, and up to £1m for aluminium exporters <i>if</i> all players remained in the market.
	One-off	Yrs	
	£ 0		
	Average Annual Benefit (excluding one-off)		
£ 47.3m (approx)	3	Total Benefit (PV) £ 137m	

Other **key non-monetised benefits** by 'main affected groups'

Key Assumptions/Sensitivities/Risks Potential infraction costs of over £8m for UK taxpayers if the UK's 2008 EU target for metals is not met.

Metals are an internationally traded commodity, so market instability cannot be precluded.

Price Base Year 2007	Time Period Years 3	Net Benefit Range (NPV) £	NET BENEFIT (NPV Best estimate) - £26m
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What is the geographic coverage of the policy/option?		UK TBC		
On what date will the policy be implemented?		Summer 2008		
Which organisation(s) will enforce the policy?		Environmt Agencies		
What is the total annual cost of enforcement for these organisations?		No change		
Does enforcement comply with Hampton principles?		Yes		
Will implementation go beyond minimum EU requirements?		Yes		
What is the value of the proposed offsetting measure per year?		£ 0		
What is the value of changes in greenhouse gas emissions?		£ 0		
Will the proposal have a significant impact on competition?		No		
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices)

(Increase - Decrease)

Increase £ 0.7m Decrease £ **Net** £ 0.7m

Key: Annual costs and benefits: Constant Prices (Net) Present Value

Summary: Analysis & Evidence

Policy Option: Amendment to the Regulations	Description: Introducing alternative types of evidence for exporter accreditation + development of an accredited reprocessors' list
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COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' Costs of previous option largely avoided.
	One-off (Transition)	Yrs	
	£ 0		
	Average Annual Cost (excluding one-off)		
	£ 0	3	Total Cost (PV) £ 0

Other **key non-monetised costs** by 'main affected groups'

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' benefits arising under previous option less likely, or much reduced.
	One-off	Yrs	
	£ 0		
	Average Annual Benefit (excluding one-off)		
	£	3	Total Benefit (PV) £ 0

Other **key non-monetised benefits** by 'main affected groups'

Key Assumptions/Sensitivities/Risks The cost of our this option will mean no **additional** costs to business, beyond their already existing compliance costs.

The potential for infraction because of a failure to reach the UK's metals packaging recycling targets cannot be totally eliminated, but it would be much reduced.

Price Base Year 2007	Time Period Years 3	Net Benefit Range (NPV) £	NET BENEFIT (NPV Best estimate) £ 0
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What is the geographic coverage of the policy/option?		UK		
On what date will the policy be implemented?		Summer 2008		
Which organisation(s) will enforce the policy?		Environmt Agencies		
What is the total annual cost of enforcement for these organisations?		£		
Does enforcement comply with Hampton principles?		Yes		
Will implementation go beyond minimum EU requirements?		No		
What is the value of the proposed offsetting measure per year?		£ 0		
What is the value of changes in greenhouse gas emissions?		£ 0		
Will the proposal have a significant impact on competition?		No		
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	no	no	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices)

(Increase - Decrease)

Increase £ 0 Decrease £ 0 **Net** **£ 0**

Key: Annual costs and benefits: Constant Prices (Net) Present Value

Evidence Base (for summary sheets)

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

1. Policy objectives and overview of the market

1.1 Rationale for Government intervention

The current situation

1.1.1 Under the Packaging and Packaging Waste Directive (Directive 94/62/EC, as amended by Directive 2004/12/EC of 11 February 2004), packaging waste exported out of the EU only counts toward recovery and recycling targets if there is sound evidence that the recovery and/or recycling operation took place under conditions “broadly equivalent” to those prescribed by relevant Community legislation.

1.1.2 In Great Britain, we have transposed this requirement through the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (thereafter called ‘the Packaging Regulations’), which require exporters to be accredited in relation to particular reprocessing sites identified in their application for accreditation. Exporters have to provide evidence to show that these sites operate to “broadly equivalent” standards. Under Regulation 26, an application for accreditation as an exporter can only be granted if the Environment Agencies are satisfied that the reprocessing site(s) specified meets the requirements of Article 6(2) of the Packaging Directive (i.e. the conditions are broadly equivalent). If the Agencies are not satisfied that the site(s) meets Article 6(2), they must reject the application. Separate but similar Regulations apply in Northern Ireland.

1.1.3 Exporters are finding it difficult to obtain evidence of “broadly equivalent” status from overseas reprocessors. Although this applies – to a varying extent - to all materials, this is of particular concern in the case of waste metal packaging, which present a low environmental risk and for which the market is buoyant. In the absence of accreditation, exporters still ship waste metal packaging to reprocessing sites outside the EU, but this material cannot be counted towards the UK’s packaging recycling targets. This places the achievement of the Packaging Directive’s recycling target for metal at risk, as the UK cannot meet this target without export. In 2006, 50% of the recycling evidence for steel packaging was generated from export; the figure for aluminium was 23%. In response to the consultation some stakeholders expressed concern that the UKs reliance on exporting waste packaging material is leading to a lack of investment in the UK infrastructure which could jeopardise the UKs ability to meet recycling targets in the future. Although this concern is a valid one, it is not relevant to the issue being considered of whether to amend Broadly Equivalent evidence requirements. This is because the material would ultimately be exported whether we make the changes to the requirements or not. The primary reason why waste metals are being exported abroad is due to the higher prices that can be commanded for the material in developing countries not necessarily because it is easier.

1.1.4 The main reasons for this situation are the costs to reprocessors of providing suitable evidence relative to the low UK tonnages they handle, and the extensive use of traders and brokers, who may not be willing to divulge their clients for commercial reasons. The price of Packaging Waste Export Recovery Notes (PERNs – the evidence note by which producers prove compliance with the Regulations) is not high enough to be a significant incentive, due to the inherent value of the metal itself. PERNs are currently trading at around £15 per tonne for steel and £50 per tonne for aluminium, whilst a tonne of waste steel can trade on average for £200, and aluminium for £1,200.

Desired outcomes of the proposals

1.1.5 The policy aims of the proposed amendment are:

- to facilitate the achievement of the recycling targets for 2008 and subsequent years for waste metal packaging - thereby avoiding infraction - by making sure that as much of the

material reprocessed in facilities outside the EU which operate under “broadly equivalent” standards as possible can be counted against the UK target (where appropriate);

- to keep the cost of compliance for metals packaging producers to a manageable level;
- to safeguard the environmental standards enshrined in Article 6(2) of the Packaging Directive.

1.1.6 The Packaging Regulations currently do not give the Environment Agencies much discretion over accreditation decisions. The proposed change would consist in amending the Packaging Regulations to reflect more closely the wording in the Directive, by introducing an option to provide a different type of ‘sound evidence’ of BE standards before an exporter could be accredited, as an alternative to site-specific accreditation. In order to protect the environmental objectives of the Directive, the default option would still be site-specific accreditation, and the alternative option would be subject to a set of specific criteria being met.

1.1.7 This package would constitute more proportionate regulation, and regulatory simplification – in line with Defra’s Better Regulation commitment. It would bring the UK in line with other Member States and closer to the Directive.

1.2 Who will be affected?

Context: the UK metals sector

1.2.1 The metals manufacturing industry plays a significant part in the UK economy. Around 550,000 tonnes of steel and 150,000 tonnes of aluminium are used annually to produce all types of commercial and consumer packaging including: drums, cans for food, beverages and paint products, promotional and giftware tins, aerosols, caps and closures and foil trays. The UK is one of Europe’s largest producers of metal packaging, with a turnover of over £1.2 billion in steel and aluminium products. The sector is a significant employer, with over 5,300 people working at around 35 plants.

1.2.2 In 2006, the UK recycled approximately 15Mt of metal of which 11Mt was post consumer ferrous (iron and steel) scrap. Of this, only 3.6Mt can be consumed within the UK market, leaving the remaining 7.4Mt to be exported. Whilst the UK has just 10 major steelworks (7 of which use 100% scrap) and some 500 foundries, there are approximately 1,300 steelworks and 50,000 foundries across the world.

1.2.3 The UK aluminium production amounts to some 340,000t (1% of world production), from three main producers (Novelis, Anglesey Aluminium and Alcan). According to the European Aluminium Association, the UK generates some 460,000t of post-consumer aluminium scrap annually. However, UK consumption of aluminium scrap is only some 73,000t, leaving 387,000t to be exported.

Packaging producers

1.2.4 The Packaging Regulations define obligated producers as any business which handles more than 50 tonnes of packaging per annum, has a turnover of more than £2 million per annum, and is involved in one or more of the following activities:

- manufacturing raw materials for packaging (including reprocessing scrap metals);
- converting raw materials into packaging;
- filling packaging (i.e. putting goods or products into packaging);
- selling packaged goods to the final user (which can be other businesses or the public).

1.2.5 In 2007, there were 1,050 registered producers with an aluminium obligation, and 1,925 with a steel obligation.

Compliance schemes

1.2.6 There are currently 26 packaging compliance schemes operating in the UK. They contract with exporters and reprocessors to discharge their producer members’ recycling obligations under the Packaging Directive.

Exporters

1.2.7 In 2006, the UK exported 7.4Mt post consumer ferrous (iron and steel) scrap, with a value in excess £740m. 40% went to Europe, 34% to Turkey, 7% to the USA and 19% to the rest of the world. This makes the UK the joint third largest ferrous scrap exporting nation in the world, with only the USA and Russia exporting significantly more ferrous metals. In 2006, the UK accounted for 44% of all European exports of ferrous metals to the rest of the world. Over the past 4 years, UK exports of scrap steel have risen on average by some 30,000t per annum, with the vast majority coming from just six exporters.

1.2.8 UK aluminium exports are rising by some 35,000t per annum. leaving 387,000t which is handled by just seven main exporters, with a value of around £400m. Of this figure, 26% was exported to Europe, 35% to China, and 29% to the rest of the world.

1.2.9 In 2006, 196,007 steel and 11,350 aluminium PERNs were issued. Assuming £10/t for steel and £50/t for aluminium this gives PERN values of £1,960,070 and £567,500, respectively. Compared to the UK steel and aluminium export values, PERNs contributed only 0.2% of the total export value for steel and 0.3% for aluminium.

Brokers/traders

1.2.10 The industry estimates there are over 10,000 active brokers and traders of recycled metals worldwide (some 2,000 alone drawn largely from the more developed nations).

Other groups with an interest

1.2.11 Citizens, environmental and conservation groups, and development charities may also have an interest in these proposals, although they will not be directly affected by them. Citizens and environmental groups may want to see that waste is being handled properly, and is recovered and recycled. We expect development charities to want to ensure that waste is not being dumped in poorer countries.

1.3 Developing policy in partnership with stakeholders

1.3.1 The difficulties encountered in complying with the broadly equivalent standards were raised by representative bodies of the metal packaging sector. A process of informal consultation with stakeholders took place in the second half of 2007, culminating with an industry proposal presented to Defra in November 2007 under the auspices of the Advisory Committee on Packaging (ACP). The ideas put forward during these discussions have been used to develop and refine policy options to maximise the buy-in of those likely to bear costs or key to delivery of the policy. This partial Impact Assessment forms part of the public consultation package published in February 2008. We welcome comments on the information it contains.

1.3.2 Devolved administrations have been involved throughout the policy development process. The accompanying consultation is joint across the UK.

1.3.3 This proposal is, in part, informed by emerging thinking in the European Commission in the context of the current revision of the Waste Framework Directive. The Commission has initiated work on the development of end-of-waste criteria for certain waste streams, and one of the waste streams being considered is scrap metal. This work provides a useful starting point for the kind of evidence relating to the characteristics of the substance (for instance that it is properly sorted, uncontaminated and sufficiently pure) which could guarantee that the environmental aims of the Packaging Directive are still met.

2. Policy option 1 – no change to the current requirements

2.1 The approach

2.1.1 Under this option, we would continue applying current requirements as they stand.

2.1.2 The table below illustrates the challenges facing metals packaging producers over the next three years.

Table 1 – projected recycling tonnages under current requirements

	a. Predicted 2007 recycling	b. Predicted 2008 recycling if no changes	e. Potential surplus from 2007	f. Tonnage required to meet EU 2008 targets	g. Predicted recycling required to meet 2008 business targets	h. Predicted recycling required to meet 2009 targets	i. Predicted recycling required to meet 2010 targets
Aluminium	45,000	42,000	3,000		49,088	53,562	56,663
Steel	372,500	342,000	36,000		377,727	378,601	379,458
Metals	417,500	384,000	39,000	410,500	426,815	432,163	436,121

Explanation

Column a. – Data from the Environment Agency with some addition for anticipated final steel numbers.

Column b. – tonnages likely to be available in 2008 under current requirements, taking into account the major exporters' market arrangements and unlikely ability to repeat 2007 equivalences on new end markets.

Column e. – Anticipated carry over from 2007 to 2008

Column f. – tonnage required to meet the EU 50% metals target

Column g. – Likely demand for 2008 based on new UK targets (35% and 68%) and the Defra percentage increases applied to the current 2007 obligated data.

Column h. – 2009 demand based on new targets and expected obligated data

Column i. – 2010 demand based on new targets and expected obligated data

As the table shows, the UK will need growth of 26,500 tonnes across the two metals to meet the EU 50% target unless carry over is allowed. Without a change in the broadly equivalent evidence requirements, the 2008 UK *steel* targets would just be met by using all the available carry over from 2007. To meet the 2008 *aluminium* targets, at least 4,000 tonnes more would have to be recycled in 11 months (approximately 9% growth). In response to the consultation one stakeholder came to the conclusion based on quarter 1 figures that the UK would meet its 2008 EU targets. We would warn against relying on quarter 1 figures and projecting them for the year ahead. Although the Q1 reprocessing data for 2008 shows an increase of around 1,600 tonnes for aluminium compared to Q1 of 2007, this is the result of increased intra-EU trade (not subject to BE) and the increase in the global market aluminium prices. The final 2008 figures may be subject to further shifts in the global market. Furthermore, the Directive target is for metal and the 2008 Q1 data for steel shows a sharp drop from Q1 of 2007 (from 37kT to 29kT). In conclusion, the current data does not support the assertion that the UK would achieve the targets without this change.

2.1.3 For 2009, there would be no material to carry over, and therefore an additional 11,500 tonnes of metals would need to be recycled compared to 2007.

2.1.4 Assuming that the required amount of material can be extracted from the waste stream for recycling, a shortfall in accredited reprocessing sites outside the EU would lead to significantly higher prices for metals PERNs, as the overall supply would be reduced dramatically. The price of PRNs (Packaging Waste Recovery Notes – the evidence supplied by UK reproducers) is the same as that of PERNs. Therefore a rise in the price of evidence for exported metals would affect the whole of the UK's metal obligation, not just the proportion which is recycled outside the EU. As an illustration of the possible scale of the increase, in 2005, a perceived shortage pushed steel PRN prices to nearly £200/tonne. They currently sit at around £15/tonne.

2.2 Economic impact

Benefits to stakeholders

Exporters

2.2.1 Higher PERN prices would benefit to those exporters who manage to acquire the relevant evidence. However, even if the price of PERNs doubled, the proportion of PERN revenue in the overall export revenue would still remain below 1%, which means that an increase in PERN prices would not on its own provide sufficient incentive for exporters to invest time and effort in obtaining broadly equivalent evidence for new sites. Exports of qualifying packaging waste for recycling outside the EU would continue, but the exported material would not count towards the achievement of the UK targets. Since more recovered material is available than the UK market can use, the recovered metal is sent to the countries where demand for manufacturing is strong. There is no likelihood of a shift away from the export market.

2.2.2 It is worth noting that UK metal exporters are disadvantaged relative to EU metal recyclers and exporters because of structural and geographical differences in markets. A high percentage of the scrap metal collected in the EU is consumed in the EU, where it is not subject to broadly equivalent evidence requirements. Given that only 25% of UK post consumer scrap is consumed by UK steelworks, the UK exports 4Mt tonnes of scrap metals outside the EU - subject to 'broadly equivalent' evidence requirements – compared to the 6Mt exported by the rest of the Members States together.

Brokers/traders

2.2.3 In theory, higher PERN prices should put brokers and traders who are willing to divulge their clients at a commercial advantage. However, because the value of PERN revenue is dwarfed by the value of the material, there is no incentive for exporters to use such brokers or traders, nor is there any financial benefit for these in being more transparent. This would remain the case even with a dramatic increase in PERN prices.

Reprocessors

2.2.4 UK reprocessors stand to benefit from significantly higher PERN prices. If the PRN/PERN price for **steel** reaches £150/t (which in the light of past experience is plausible), UK reprocessors producing 200,000t of steel evidence would generate £30m of revenue (out of a total expected PRN/PERN revenue of £56.4m). At a more normal PRN price of £15/t, the income would be £3m (out of a total expected PRN/PERN revenue of £5.6m).¹

2.2.5 Steel reprocessors are also 'producers' under the Packaging Regulations, and carry a 6% share of the cost of evidence. Therefore if the price of evidence increased to £150/t, the cost to reprocessors would be approximately £3.4m, giving UK reprocessors a net benefit of £26.6m (compared to a net benefit of £2.66m with evidence prices at £15/t).

2.2.6 If the PRN/PERN price for **aluminium** reached £150/t, UK reprocessors producing 35,500t of aluminium evidence would generate £5.3m of revenue (out of a total expected PRN/PERN revenue of £6.9m)². At the current average PRN price of £50/t, the income would be £1.8m (out of a total expected PRN/PERN revenue of £2.3m).

2.2.7 Like their steel counterparts, aluminium reprocessors are also 'producers' under the Packaging Regulations, and carry a 3% share of the cost of evidence. Therefore if the price of evidence increased to £150/t, the cost to reprocessors would be approximately £0.2m, giving UK reprocessors a net benefit of £5.1m (compared to a net benefit of £1.7m with evidence prices at £50/t).

2.2.8 In the UK aluminium market, one reprocessor produces both the majority of recycling evidence and a large proportion of aluminium packaging. It is therefore not in their interest to see

¹ Based on an assumption that a slightly greater proportion of the evidence generated in 2007 came from PRNs rather than PERNs, which as of Q3 of 2007 seems plausible

² for comparability purposes, this excludes revenue from the expected carry-over

prices rise unreasonably for fear of losing market share to other materials. However, they would find it difficult to restrain prices if they rose too high as it would affect their market competitiveness.

2.2.9 The high prices could attract new entrants into the metals reprocessing market, who see it as an opportunity to make a quick commercial gain, as was the case in 2005. However, such new entrants may not be long-term, committed participants in the increase of metal packaging recovery, or be fully aware of regulatory requirements. Therefore, one cannot take for granted that new entrants would make a positive impact on the long-term recycling performance of waste packaging in the UK.

Costs to stakeholders

Producers

2.2.10 The consequences of keeping the current requirements unchanged are difficult to quantify due to the unpredictability of the global metal market demand. Best estimates have therefore been used to produce a picture of the likely costs to producers.

2.2.11 The table below shows the split in likely additional costs of an increase in PRN/PERN price to £150/tonne (from £15/t for steel and £50/t for aluminium) across the four categories of businesses obligated under the Packaging Regulations.

Table 2: relative impacts of a PRN/PERN price rise to £150/t by packaging producer category, 2008-2010

	2008 Additional cost of a rise to £150/t in PRN/PERN prices		2009 Additional cost of a rise to £150/t in PRN/PERN prices		2010 Additional cost of a rise to £150/t in PRN/PERN prices		Total potential additional cost over three years	
	Aluminium	Steel	Aluminium	Steel	Aluminium	Steel	Aluminium	Steel
Raw material	£0.15m	£2.82m	£0.16m	£2.83m	£0.17m	£2.84m	£0.49m	£8.49m
Converter	£0.55m	£3.56m	£0.66m	£3.56m	£0.64m	£3.57m	£1.80m	£10.69m
Pack/filler	£2.09m	£17.72m	£2.28m	£17.76m	£2.41m	£17.80m	£6.78m	£53.29m
Seller	£2.11m	£26.89m	£2.31m	£26.95m	£2.44m	£27.14m	£6.86m	£80.86m
	£4.9m	£50.99m	£5.36m	£51.11m	£5.67m	£51.23m	£15.93m	£153.33m

2.2.12 This table shows that the biggest impact of higher PRN/PERN prices will be for retailers and packer/fillers. Steel converters have a lower share of the overall cost, but it represents a greater proportion of their operating profit. The steel drum industry may be disproportionately affected, as many of them operate at extremely low margins, and a significant increase in compliance costs would mean some of them could go out of business.

2.2.13 Paradoxically, higher PRN prices might ultimately hit some of the same businesses they would benefit. Failure to achieve recycling targets could have a significant economic impact on the manufacturers of metal packaging, especially on the integrated aluminium companies that are involved in closed loop production of aluminium for packaging purposes. As PRN prices increase, they become an increasingly significant element of the cost a package. Drinks fillers and retailers filling/selling carbonated soft drinks have the choice of using aluminium or steel cans, PET bottles or glass. If aluminium and steel PRN prices increase to such an extent that they are significantly higher than the other materials, users may decide to switch away from metals. In addition, in a context of growing customer and supply chain expectations of sustainability, a failure to meet recycling targets could potentially lead to substitution into materials deemed to have a better environmental record. This would have a significant impact on turnover and profitability. Plant closures and job losses would be inevitable if material substitution was widespread.

Compliance Schemes

2.2.14 Compliance schemes would be affected in a number of ways:

- Planning – the current broadly equivalent requirements have created uncertainty over the likely availability of evidence from particular reprocessors and exporters. Many of them are not prepared to commit to tonnages of evidence at this stage, given the problems they experienced in 2007 in obtaining equivalence. Schemes are therefore finding it difficult to plan supply or the measures they should take to improve supply;
- Costs – schemes are required to pass on the cost of evidence to their members who are looking for reasonable estimates for the year ahead for budgeting purposes. The huge potential swings in cost caused by market uncertainty make this extremely difficult. Schemes also have to plan their cash flows in relation to the likely costs. Ultimately, a shortfall in PRNs/PERNs could prevent schemes from meeting their member's obligations, which could lead to prosecution;
- Compliance – given the dependence on protocols for a high proportion of the evidence in the metals sectors, it is extremely difficult for schemes to develop additional supplies of waste

metal packaging should a shortage develop. Generally, non-protocol metal packaging – food and beverage cans – has to be collected from the domestic sector requiring long range planning and implementation on a large scale. Compliance Schemes may decide to take a legal view on the ability of the market place to deliver sufficient PRN/PERNs to meet customer demand. This could lead to decisions to suspend aluminium trading until such time as the regulatory position is clearer. Such action would debilitate the PRN systems' ability to provide for continued forward investment in recycling infrastructure etc.

Exporters

2.2.15 Where exporters have entered into contracts to supply schemes or producers, the continuation of current requirements could prevent them from supplying the contracted volumes of PERNs. This could lead to additional costs for exporters of purchasing PERNs from third parties at a high price to fulfil their contracts. Alternatively, this could lead to legal action by schemes or producers for breach of contract. It is not possible to quantify these costs accurately.

2.2.16 One major steel exporter reports that a considerable amount of senior management time has been expended on seeking evidence from reprocessing sites and persuading their brokers to release the details of their consumers. Across the 6 major exporters, a rough estimate of administrative costs using the Standard Cost Model runs to £700,000 for 2007. In addition, industry is concerned that given the choice of material from a country where the evidence requirements do not apply (e.g. USA, Japan, Russia) or the UK - brokers may choose to go elsewhere in the future if this situation persists.

2.2.17 In extremis, some exporters may decide to not register as an accredited exporter. If all exporters decided to follow this path, it would mean that around 37% of the aluminium packaging and 32% of the steel packaging collected for recycling would no be officially reported. This would in turn lead to the UK not being able to meet its 2008 metals recycling targets.

Costs to UK taxpayers

2.2.18 If the UK failed to meet the EU targets for this compliance year, infraction proceedings are likely to be unavoidable. These proceedings would take place over a long period of time and would require a significant amount of departmental resource. There is a risk that at the end of these proceedings the UK would be fined.

2.2.19 If fines were to be imposed, they would be significant and would take the form of both a periodic payment and a lump sum. The rate of the fine will be calculated from three fundamental criteria:

- The seriousness of the breach, including the importance of the Community provisions infringed and the effects of the infringement on the public interest or the interests of individual parties;
- Duration of the breach. This runs from the date of the article 226 judgment up until the date the case is referred to the Court;
- Deterrent factor so that the sanction is sufficiently high to ensure that the Member State rectifies its breach and does not repeat the same offence. The deterrent effect is based on the Member State's ability to pay and the number of votes it has in Council.

2.2.20 Lump sum fines are based on a daily flat rate (currently €200) enhanced according to the seriousness of the breach and a deterrent factor, multiplied by the number of days the breach persists. A minimum lump sum is set for each Member State, and the minimum lump sum for the UK is set at nearly €11m (about £8m).

Unintended consequences

2.2.21 Key players (including the Advisory Committee on Packaging) have warned that there is a risk that some producers would make a rational economic decision and face prosecution rather than pay for PERNs at an inflated price, as the fines are currently too small to act as a deterrent. This would put in jeopardy not only the achievement of the UK's Packaging Directive target for metals, but

also compliance with the EU Directive targets for overall recovery and recycling in 2008. Infraction proceedings cannot be ruled out.

2.2.22 The likely tipping point for non-compliance is extremely difficult to judge as it has never been tested. In 2005, steel evidence prices moved close to £200 and there was speculation that beyond this price, the cost of compliance outweighed the potential consequences on non-compliance. However, a number of factors affect this. It is likely, for instance, that a compliance scheme would be prepared to pay over that price for balancing tonnage on a small scale. It is also likely that if a scheme saw that the market in general would fail, it is likely to consider planned failure to avoid financially disadvantaging its members.

2.2.23 'Planned failure' decisions could give rise to wide differences in compliance cost between compliance schemes, which are not realistic. This would have the perverse effect of making schemes that are trying to comply much more expensive than those that are not, and so make the latter more attractive to producers.

2.3 Environmental impact

2.3.1 There are sound environmental reasons why 'broadly equivalent' criteria exist, and they are enshrined in a number of international agreements which the UK has signed. Regardless of the requirements enshrined in the Packaging Regulations, exports are in any case only allowed to sites operating to 'broadly equivalent' environmental standards under the Waste Shipments Regulation. The difference is that the Packaging Regulations currently require evidence for individual sites as part of exporter accreditation, and the Waste Shipments Regulation does not.

2.3.2 Site-specific accreditations allow better tracking of waste movements, and keeping current requirements would mean that all materials, regardless of their environmental impact or value, are treated in a consistent fashion. The present system is rigorous in terms of the evidence required by the exporter, and relatively straightforward for the Agencies to operate.

2.3.3 It should be noted that regardless of the financial costs of keeping requirements as they currently are, the environmental equation would be unaffected as the material would still be exported and reprocessed. It would just not be counted against the UK's recycling targets.

2.4 Social impact

2.4.1 We do not currently have enough information about the vulnerable sectors mentioned above (convertors and steel drum industry) to carry out a proper analysis of social impacts if those sectors contract

2.4.2 We have considered the impact tests on race, disability and gender equality, and human rights. We have concluded that the policy proposals under consideration will not have any impact relating to any of these tests.

3 Policy option 2: Introducing alternative types of evidence for exporter accreditation

3.1 The approach

3.1.1 The proposed change, in order to achieve the policy aims, would be to amend the Packaging Regulations to reflect more closely the wording in the Directive, by introducing a requirement to provide ‘sound evidence’ of BE standards before an exporter could be accredited as an option to complement site-specific accreditation (which would remain the default option).

3.1.2 The proposed changes would involve giving the Environment Agencies (the Environment Agency in England and Wales and SEPA in Scotland) more discretion to consider alternative evidence of the metal being reprocessed under broadly equivalent standards overseas, where reprocessing sites are not known at the time of exporters’ application for accreditation.

3.1.3 A key element of this proposal is the development of suitable criteria for equivalence. They are included in the consultation document which this Impact Assessment underpins (see <http://www.defra.gov.uk/environment/waste/topics/packaging/index.htm>). They draw on the European Commission’s end-of-waste protocol work.

3.1.4 It is expected that only metal exporters will be able to avail themselves of the new provisions of the Regulations. The environmental impact of the material exported will be of the utmost importance in the decision to accredit exporters where reprocessing sites may not be known at the time of application.

3.1.5 As Table 3 below shows, if the proposed changes are made to the Regulations, it is expected that the steel business targets would be easily met, but there would still be a need for more aluminium waste packaging to be recycled to meet the business targets for 2008. The overall EU metals target for 2008 would be easily met. However, the proposed 2009 targets would still need require an additional 4,500 tonnes of aluminium to be recycled compared to 2008. While this is a significant improvement over the status quo, it would still be a considerable challenge.

Table 3: Projected recovery and recycling of tonnages under new proposal

	a. Predicted 2007 recycling	b. Predicted 2008 recycling if no changes	c. Potential addition from changes	d. Predicted tonnage available in 2008 if changes agreed	e. Potential surplus from 2007	f. Recycling required to meet EU 2008 targets	g. Predicted recycling required to meet 2008 business targets	h. Predicted recycling required to meet 2009 targets	i. Predicted recycling required to meet 2010 targets
Aluminium	45,000	42,000	3,750	45,750	3,000		49,088	53,562	56,663
Steel	372,500	342,000	31,000	373,000	36,000		377,727	378,601	379,458
Metals	417,500	384,000	34,750	418,750	39,000	410,500	426,815	432,163	436,121

Explanation:

- Column a. – Data from the Environment Agency with some addition for anticipated final steel numbers.
- Column b. – tonnages likely to be available in 2008 under current requirements, taking into account the major exporters’ market arrangements and unlikely ability to repeat 2007 equivalences on new end markets.
- Column c. – What is considered to be available if the current proposals are adopted and applied to all PERNs issued after the change, including for eligible material exported from the start of 2008. This is still less than what would have been available prior to the broadly equivalent requirements, because it will not be possible to identify the end market through brokers/traders.
- Column d. – (=b+c) Total likely to be available for 2008 based on 2007 recovery levels
- Column e. – Anticipated carry over from 2007 to 2008
- Column f. – tonnage required to meet the EU 50% metals target

Column g. – Likely demand for 2008 based on new UK targets (35% and 68%) and the Defra percentage increases applied to the current 2007 obligated data.

Column h. – 2009 demand based on new targets and expected obligated data

Column i. – 2010 demand based on new targets and expected obligated data

3.2 Economic impact

Benefits to stakeholders

Producers and compliance schemes

3.2.1 The likely gains arising from the proposals are difficult to quantify due to the unpredictability of the global metal market demand. Best estimates have therefore been used to produce a picture of the likely benefits, which can be quantified roughly as the *avoidance of the costs described in Section 2.2 above*.

3.2.2 The benefits of the proposed changes to producers and compliance schemes are as follows:

- the predicted increase in the available evidence would contain costs to producers to a reasonable level. Cost increases cannot be ruled out altogether, given that the aluminium recycling target for 2008 will remain challenging;
- the market would be able to plan its supply of evidence with much greater certainty and therefore reduce the uncertainty regarding compliance with EU Directive targets for 2008 and enforcement risks to producers and compliance schemes.
- the costs to producers would more accurately reflect the real recycling achievements.

3.2.3 It is more likely that targets will be met, therefore the potential costs of material substitution (stemming from an loss of credibility of metals in terms of perceived sustainability) will not be realised.

Exporters, brokers/traders

3.2.4 Steel exporters would save a large part of the administrative costs described in sections 2.2.16 above. We do not currently have the same information for aluminium exporters, but would expect them to be able to achieve similar savings.

3.2.5 The proposed changes would have no impact on brokers/traders

Reprocessors

3.2.6 The main benefit to UK reprocessors would be that the market would not be distorted by the exporters pushing PRN prices up hugely, and the reprocessors having to follow suit to remain competitive, but then finding they lose market share to other materials through substitution. Some respondents to the consultation asserted that the price of PRNs was a function of the market place and that exporters played a lesser role in setting prices. Although the PRN system is a market based mechanism and exporters don't set prices, the activities of exporters does have an effect on the market.

Benefits to UK taxpayers

3.2.7 This proposal would make it more likely that the industry would meet the Packaging Directive recycling targets for metals in 2008. It would ensure the continued operation of the market for metal PERNs by facilitating supply. This would limit – although not totally eliminate – the risk of infraction, and the resultant fines.

Costs to stakeholders

3.2.8 The proposal would carry no additional costs for stakeholders. Any potential growth in the share of evidence notes coming from exports as a result of the proposals would not impact on UK reprocessors, because these do not compete with export markets for inputs (export markets are far

more reliant on protocol metals, whereas UK reprocessors tend to deal with 100% packaging material.

3.2.9 The Environment Agency expects this proposal to be cost-neutral, at least in the short term.

Unintended consequences

3.2.10 There is a risk of legal challenge by other material sectors, which cannot be totally eliminated. On the other hand, if current requirements were not changed, the UK might face the risk of legal challenge by the aluminium industry.

3.3 Environmental impact

3.3.1 Regardless of the requirements enshrined in the Packaging Regulations, exports are in any case only allowed to sites operating to 'broadly equivalent' environmental standards under the Waste Shipments Regulation. The difference is that the Packaging Regulations currently require evidence for individual sites as part of exporter accreditation, and the Waste Shipments Regulation does not.

3.3.2 The proposed regulatory amendments are not material-specific. In theory therefore, exporters of other materials could apply for accreditation under the new option. However, this would rely on their ability to prove that they meet the eligibility conditions set out in the Regulations. These are designed to ensure that Article 6(2) of the Packaging Directive is fulfilled. The environmental impact of the material exported will be of the utmost importance in the decision to accredit exporters. Current market conditions and enforcement intelligence suggest that only metals waste packaging will fulfil the criteria.

3.3.3 From an environmental perspective, the impact of this proposal would be low. Scrap metals have a high intrinsic value, so there is little or no risk shipments would get dumped. Metal smelting is a relatively clean process and market intelligence suggests that most of the metal exports are reprocessed at top of the range industrial plants. These are often owned by major multi-national companies. The environmental benefits of recycling metals are beyond doubt.

3.4 Social impact

3.4.1 We have considered the impact tests on race, disability and gender equality, and human rights. We have concluded that the policy proposals under consideration will not have any impact relating to any of these tests.

3.5 Outcome of consultation

3.5.1 27 of 31 responses (87%) supported the assessment of the metals market as outlined in the consultation and 64% (16 who expressed a view) agreed with the analysis of maintaining the status quo: a potential shortage of PERNs and significantly increased costs for producers with an obligation in metals, plus jeopardising the UK's achievement of the material specific Directive targets for metal.

3.5.2 23 respondents (74%) supported the proposed option, therefore, we intend to make the amendments as proposed.

4. Accompanying measure – approved reprocessors’ list

4.1 The approach

4.1.1 Industry key players suggested that, *regardless of the option chosen*, having access to a list of all the reprocessors already accredited would help make optimum use of the evidence at exporters’ disposal for the benefit of all metals packaging producers.

4.1.2 Work is in hand already at the Environment Agency to get this compiled from current information. More information on the proposal is available in the consultation document at <http://www.defra.gov.uk/environment/waste/topics/packaging/index.htm>.

4.1.3 To add to this list, we propose that metals trade associations, with the UK Government’s support, should write to the governments of the main importing countries to seek information or reassurances about the broadly equivalent status of the facilities which take scrap metals. The aim is to try and gather evidence from those governments and the Competent Authorities direct, rather than individual reprocessors.

4.2 Economic impact

Benefits to stakeholders

Producers, compliance schemes and exporters

4.2.1 The proposed list would clearly help reduce producer administrative costs. Industry estimates that it takes about one day to do a site visit and report, and one other day pulling together the application / chasing licences / reviewing documentation etc. This equates to a cost of £1000 per site, on average. The list would remove duplication of such site visits, and help to stabilise supply.

Other stakeholders

4.2.2 It is expected that this proposal would have no impact on reprocessors, brokers or traders.

Benefits to UK taxpayers and the industry

4.2.3 There should be a major saving for the Environment Agencies in checking and approving all the part “Cs” from different exporters, as this would only be necessary once for each overseas site. This is expected to contribute to financing the costs of setting up and maintaining the list.

Unintended consequences

4.2.4 The exporter community remains concerned that the database may fail to protect commercially sensitive information or may allow the some exporters to free ride on the work of others (that is, do very little to chase up evidence of equivalence themselves but benefit by automatically having their own sales to approved reprocessors validated).

4.2.5 One suggestion has been that exporters have the right to either opt in or out of the system i.e they can choose not have details of their own customers placed on the database but if so they would not be allowed to benefit from the details put on by others. In other words, they would have to obtain evidence of broadly equivalent status for each of their customers themselves. In principle, there should be a degree of commonality in exporters’ respective customer bases, and they should collectively benefit from the fact that a site only has to be approved once. The exporter would be able to ask the EA if a site has already been approved when a sale is made and if not seek the relevant evidence. This should mean we stop duplication and focus effort on increasing the overall population of approved overseas facilities.

4.3 Environmental impact

4.3.1 This proposed accompanying measure has no environmental impact.

4.4 Social impact

4.4.1 This proposed accompanying measure has no social impact.

4.5 Outcome of consultation

4.5.1 24 respondents, who expressed a view, supported this proposal and therefore we intend to take this work forward with the Environment Agencies

5. Implementation and evaluation

5.1 Implementation

5.1.1 We foresee that, following the current consultation, final proposals will be put forward with the Government response in early June. The proposed Regulations will then be subject to Parliamentary scrutiny, which would mean that it is likely that it would come into force by the end of July 2008.

Enforcement

5.1.2 We do not envisage new enforcement provisions, save those relative to suspension and cancellation of accreditation (see Regulations 2(7)-2(9) of the amending Regulations at Annex A to the consultation document).

5.2 Evaluation

5.2.1 The policy will be reviewed in Q1-2 2009 to establish whether the UK met the EU Directive targets, and at the same time every year thereafter as part of target monitoring.

6. Summary and Recommendation

6.1 Consultation

6.1.1 The Department for Business, Enterprise and Regulatory Reform (BERR), Treasury, Cabinet Office, Scottish Executive, Welsh Assembly Government, Northern Ireland Administration, Environment Agency, Environment and Heritage Service Northern Ireland (EHSNI), Scottish Environmental Protection Agency (SEPA).

6.2 Public Consultation

6.2.1 This Impact Assessment accompanies a Government consultation document and presents overall costs and benefits of the proposals. The Government welcomes responses from as wide an audience as possible with respect to the issues outlined in the consultation paper. As part of this process the Government invited responses from all interested parties including individually registered producers, packaging compliance schemes, reprocessors, exporters, trade associations, brokers and material organisations. The Government consulted for a period of eight weeks and this IA has been finalised in light of the comments received from stakeholders.

6.2.2 Informal consultation with compliance schemes, reprocessors, the project management group for the NPWD (consisting of Environment Agencies, Industry, Defra and reprocessors), took place in developing a number of the proposals contained within this RIA and consultation document. In addition the Advisory Committee on Packaging (ACP) and its chairman John Turner played a vital role in this process.

6.3 Summary and Recommendation

6.3.1 This Impact Assessment considers changes to the Packaging Regulations by amendment to the packaging targets.

6.3.2 The increases to the targets are intended to improve the workings of the system so as to underpin the UK system for achieving the Directive targets. The Government believes that the benefits of the proposals in the consultation paper and discussed in this IA are significant as against the likely costs.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	Yes/No	Yes/No
Small Firms Impact Test	Yes/No	Yes/No
Legal Aid	Yes/No	Yes/No
Sustainable Development	Yes/No	Yes/No
Carbon Assessment	Yes/No	Yes/No
Other Environment	Yes/No	Yes/No
Health Impact Assessment	Yes/No	Yes/No
Race Equality	Yes/No	Yes/No
Disability Equality	Yes/No	Yes/No
Gender Equality	Yes/No	Yes/No
Human Rights	Yes/No	Yes/No
Rural Proofing	Yes/No	Yes/No