Summary: Intervention & Options

Department /Agency:	Title:	
National Measurement Office/DIUS	Impact Assessment of The Hallmarking Act 1973 (Application to Palladium) Order 2009	
Stage: Final	**Version:** 2	**Date:** 20 January 2009
Related Publications: None		

Available to view or download at:

http://www.nmo.dius.gov.uk/content.aspx?SC_ID=283

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

The problem is one of lack of consumer protection for buyers of precious metal articles made from palladium. Palladium is a precious metal that is not covered by the hallmarking regime. Trade in palladium jewellery has up to now been suppressed by manufacturing difficulties. These difficulties have now been overcome and trade is expected to increase substantially.

Government intervention is necessary to protect the consumer by reducing the asymmetry of knowledge between sellers and buyers - it is not possible to assess the purity of palladium without technical means, i.e. assaying. Hallmarking

What are the policy objectives and the intended effects?

The policy objective is to bring palladium within the hallmarking regime. The intended effect is to increase consumer protection. A secondary effect is that the trade in palladium jewellery is expected to increase due to the guarantee of purity provided by the hallmark..

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

1. No intervention.

2. Voluntary palladium identification marking

3. Require precious metal articles containing palladium to be hallmarked under the Hallmarking Act. This is the option preferred by all respondents to the public consultation because it means all non-exempt palladium articles will have to be hallmarked, thereby providing consistency in the market place and increased consumer protection due to the removal of asymmetry of knowledge between seller and buyer

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? 2014

Ministerial Sign-off For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.

Signed by the responsible Minister:

..... Date:

Summary: Analysis & Evidence

Policy Option: Make the proposed regulations	Description: Implementation of the 2001 Amendment of the Hallmarking Convention

COSTS

ANNUAL COSTS	
One-off (Transition) **Yrs**	Description and scale of **key monetised costs** by 'main affected groups' Net increase in articles to be hallmarked due to increased demand for palladium (~£37K p.a.).
£ 8K	
Average Annual Cost (excluding one-off)	
£ 50K	**Total Cost** (PV) **£ 208K**

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

BENEFITS

ANNUAL BENEFITS	
One-off **Yrs**	Description and scale of **key monetised benefits** by 'main affected groups' Increased sales of palladium jewellery (~£50K p.a.) and removal of the detriment of buying undercarated items (~£60K p.a.).
£ -	
Average Annual Benefit (excluding one-off)	
£ 110K	**Total Benefit** (PV) **£ 463K**

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

Key Assumptions/Sensitivities/Risks Where palladium jewellery displaces other precious metal jewellery, the hallmarking costs of the palladium jewellery is off-set by the savings in hallmarking costs of the other jewellery.

Price Base Year 2009	Time Period Years 5	**Net Benefit Range** (NPV) **£ 11K – £2,866K**	**NET BENEFIT** (NPV Best estimate) **£ 255K**

What is the geographic coverage of the policy/option?				UK	
On what date will the policy be implemented?				Autumn 2009	
Which organisation(s) will enforce the policy?				Trading Standards	
What is the total annual cost of enforcement for these organisations?				£ cost neutral	
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?				£ Not required	
What is the value of changes in greenhouse gas emissions?				£ negligible	
Will the proposal have a significant impact on competition?				No	
Annual cost (£-£) per organisation (excluding one-off)	Micro **N/K**	Small **N/K**	Medium **N/K**	Large **N/K**	
Are any of these organisations exempt?	No	No	N/A	N/A	

Impact on Admin Burdens Baseline (2005 Prices) (Increase - Decrease)

Increase of £ neutral Decrease of £ neutral **Net Impact** £ neutral

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. INTRODUCTION

1.1 This impact assessment of the estimated costs and benefits of adding palladium as a precious metal to the Hallmarking Act 1973 has been updated following the public consultation (Oct – Dec 2008). No change to the annual costs and benefits in the initial study has been found necessary as the consultation confirmed the original estimates to be satisfactory.

1.2 All responses received by the consultation supported option 3 – the compulsory prescription of palladium. Respondents believed this would lead to an increase in the sales of palladium goods. Information received from manufacturers has given additional confidence to the costs and benefits estimates presented later in this document.

1.3 During the exercise to identify the amendments needed to add palladium to the Hallmarking Act, it was noticed that section 5(5) had omitted to permit platinum coatings to be applied to the substrates of lower ranking precious metals. An amendment to correct this omission was added to the proposed amendments for palladium. However, legal advice received during the consultation advised that the Hallmarking Act had no powers to amend section 5(5) with respect to gold, platinum or silver. This means that the proposed changes to platinum coatings have been dropped. The omission had not been noticed before and it is believed that the industry has been applying platinum coatings since platinum was first prescribed in 1973 so there will be no economic changes as a result of this amendment.

2. BACKGROUND

2.1 The Hallmarking Act 1973 makes provision for the compulsory hallmarking of gold, silver and platinum. Platinum, although a precious metal, was not covered by UK hallmarking law before 1973 but at that time it was thought appropriate to include it within the legislation as the use of platinum in jewellery was increasing. Although palladium had a number of common features with platinum, there was very little demand for palladium jewellery in the UK at that time mainly because there were technical difficulties in making jewellery from palladium. The demand for white precious metal jewellery in fashion and design was met by silver, white gold (a gold alloy with a rhodium coating) and platinum.

2.2 The circumstances have now changed; palladium alloys have been developed which enable the manufacturing difficulties to be met. The jewellery trade now considers it likely that the demand for palladium jewellery (which has already increased materially since 1973) will continue to increase in a way which reflects the growth in sales of platinum jewellery.

2.3 Palladium is a noble metal that has the following properties:

- Bright white in colour – similar to platinum
- Does not tarnish in air
- Density – relatively low compared with gold, silver or platinum
- Precious – more expensive than silver and 9ct gold but less expensive than platinum and 14ct or 18ct gold

2.4 Palladium is already recognised internationally to be a precious metal, e.g. ISO 9202:1991“Jewellery – Fineness of precious metals”, but due to its difficulty of working it is not prescribed in many countries yet. In EEA Member States that have equivalent controls to the UK it is prescribed in Estonia, Latvia, Lithuania, Romania and Slovenia. The International

Hallmarking Convention will permit the Common Control Mark to be affixed to palladium once the 2001 Amendment has been ratified.

3. THE MARKET

3.1 Palladium came into focus as a potential material for making jewellery as a result of increases in the price of platinum and gold on the world metals market, coupled with increasing competition in the retail jewellery market and changes in design and fashion for precious white metals. These competitive and other pressures resulted in a search for a metal that could act as both a lower cost alternative to platinum or white gold and could complement them in terms of design possibilities. Technological developments in the creation of suitable alloys have also increased the workability of palladium alloys, making the metal more suitable for fabrication into jewellery and as a result more suitable as a cheaper or better substitute for white gold, platinum and possibly silver.

3.2 Although the market is limited at present, there are strong reasons to expect that the market will grow considerably. The primary reasons for the expected growth are:

- cost / value - as previously mentioned palladium enjoys a price advantage over platinum and 14ct and 18ct gold
- metal quality - palladium is easy to polish and has a bright white shine which does not tarnish (unlike silver). It has a good quality, durable, colour finish which can only be matched by white gold items if they are coated with rhodium. A plated finish is not desirable in the high-cost luxury market, as consumers do not expect this characteristic from items described as gold, (even if the description is “white gold”); moreover, the plating and finish are lost through use.
- density - palladium is 40% less dense than platinum and 26% less dense than 18ct white gold. Consequently, there is a double benefit in using palladium for fashion jewellery - a less expensive and a lighter metal.
- substitutability - as mentioned above, palladium is a strong competitor for the white gold jewellery market, approximately 15 tonnes of which was sold in the UK in 2007.
- imported palladium jewellery is already on sale in the UK at independent retail shops. At least one large multiple retailer is offering items on its website and a TV shopping channel is planning to launch or has already launched palladium jewellery lines.

3.3 In these circumstances the jewellery trade expect that palladium will rapidly become a common material for jewellery sold in the UK. The expectation of Johnson Matthey, the leading refiner and fabricator of precious metals in the UK, is that the market for metal and alloyed semi manufactured products could be £5 - £6 million in 5 years time and double that (or more) in ten years time. Their estimate is that the number of items could be 450,000 or more in ten years time. This would represent about 15% of the UK jewellery market by item numbers, excluding 9ct gold and silver (which would not compete with palladium).

4. OPTIONS APPRAISAL

4.1 The following options were considered by the public consultation:

a. Option 1 - Do nothing

b. Option 2 - Voluntary palladium identity marking

c. Option 3 - Require precious metal articles containing palladium to be hallmarked under the Hallmarking Act.

4.2 The unanimous choice of the consultation respondents was the compulsory prescription in Option 3 and the Government has adopted this option accordingly. The justification, costs, and benefits for compulsory prescription are reproduced below from the initial impact assessment

(V1) but have been updated by the limited amount of commercial information submitted to the consultation.

4.3 Option 1 – Do nothing

4.3.1 The apparent advantage of this option is that if the market for palladium jewellery does not develop, the setting-up costs for creating a voluntary or compulsory system are avoided. However, because the assaying and hallmarking infrastructure is already in place for the compulsory marking of gold, etc, the additional fixed costs associated with the introduction of voluntary or compulsory hallmarking for palladium are likely to be very limited.

4.3.2 Sales of palladium jewellery will probably increase because the metal will become more fashionable now it is more workable. However, the lack of UK hallmarks for palladium may well dampen development of the market because of the information asymmetry problems faced by consumers. The uncertainty in the purity of goods on sale may impede the development of the market, thus reducing consumer choice and innovation in jewellery design. Under a “do nothing” policy, there is a danger that the market might not develop as much as it could.

4.3.3 If the market did develop and for various reasons hallmarking was to be subsequently introduced, there could be a significant pool of legitimate but unhallmarked items on the market. The legitimacy of these unhallmarked items would confuse consumers and make enforcement more difficult. The problem will worsen the longer the wait-and-see approach.

4.3.4 Costs and benefits

4.3.4.1 Table 1 below sets out the likely financial impact of adding palladium to the UK hallmarking regime based on assumptions that have been checked by the UK jewellery trade and the UK assay offices. There will always be some intrinsic demand for palladium jewellery, irrespective of its hallmarking status.

4.3.4.2 Because of the uncertainty surrounding the likely volume of trade in palladium jewellery if hallmarking were to be introduced for this metal, the financial impact has been calculated over possible demand ranges of two orders of magnitude – from 1,000 to 100,000 units per annum. As might be expected, the net costs and benefits for doing nothing are zero.

4.3.4.3 There is evidence that the lack of hallmarking for palladium is currently causing some problems for the trade, and that the trade is selling palladium at present on the basis that it will be hallmarked in the future

4.3.5 Assessment of Option 1

4.3.5.1 Because the ‘Do nothing’ option is the baseline, the net costs and benefits of this option are zero.

	Options	Do nothing			Voluntary			Compulsory		
	Demand	**Low**	**Medium**	**High**	**Low**	**Medium**	**High**	**Low**	**Medium**	**High**
1	Number of Palladium articles	1,000	10,000	100,000	1,250	12,500	125,000	1,500	15,000	150,000
2	Additional hallmarking costs	£0	£0	£0	£10,202	£66,016	£624,156	£8,542	£49,422	£458,219
3	Additional benefits from hallmarking	£0	£0	£0	£5,500	£55,000	£550,000	£11,000	£110,000	£1,100,000
4	**Net Benefits**	**£0**	**£0**	**£0**	**-£4,702**	**-£11,016**	**-£74,156**	**£2,458**	**£60,578**	**£641,781**
5	Value of Palladium items	£100,000	£1,000,000	£10,000,000	£125,000	£1,250,000	£12,500,000	£150,000	£1,500,000	£15,000,000

Table 1: Costs and benefits for the different options

Notes and assumptions

1 Where palladium jewellery displaces other precious metal jewellery the hallmarking costs of the palladium jewellery is off-set by the savings in hallmarking costs of the other jewellery

2 There will be some intrinsic demand for palladium jewellery, irrespective of its hallmarking status. This is represent by the low (1,000), medium (10,000) and high (100,000) demand scenarios under the status quo.

3 When hallmarked, some palladium will displace some other hallmarked materials. However, there will be some intrinsic demand for hallmarked palladium jewellery, which is more than the demand for unhallmarked, and which does not displace other hallmarked jewellery. As a result there is a net market expansion effect.

4 The retail profit margin on undercarated jewellery is not included as a benefit.

5 Displaced hallmarking is assumed to have the same individual/batch ratio. This will overestimate the benefit of voluntary hallmarking.

6 The benefits of additional items sold - net of displacement of other hallmarked items - is captured by an estimate of the profit + consumer surplus. The assumption here is that the value added within the UK is independent of the value of the underlying metal. This approach avoids the problem that on a pure retail price approach it would be necessary to account for the reduction in unit price if palladium displaced platinum

etc. The initial value of profit + consumer surplus is put at £10 per item (10% of retail price). This is designed to be conservative. The net benefit is sensitive to this number The market expansion assumptions are initially set at 25% for voluntary and 50% for compulsory hallmarking.

7 One of the main drivers of net benefit is the detriment of buying undercarated items. The initial assumption is that the detriment is 30% of the purchase price. The outcome is also sensitive to the proportion of undercarated items when compulsory hallmarking is not present. Initial value is 20% of items sold, which is likely to be conservative.

8 The average retail price of a palladium item is £100.

4.4 Option 2 - Voluntary palladium identification marking

4.4.1 The advantage of this option is that manufacturers and/or retailers will not have to incur the costs of hallmarking if they do not believe that hallmarking palladium jewellery will be sufficiently attractive to customers to pay for the additional costs involved. However, there are a number of disadvantages to this approach:

a. Even in a voluntary system, legislation will be required to specify the finenesses, weight exemptions, etc, of palladium articles in exactly the same way as for other precious metals. The absence of such requirements would lead to anarchy with consumers not knowing what a palladium hallmark represented.

b. The legitimate existence of both marked and unmarked items in circulation will make consumer protection more difficult because of the uncertain legitimacy of items that lack a hallmark.

c. Consumer protection will be compromised with respect to unmarked items:

   i. general misdescription of palladium items (e.g. fineness), or items purporting to be made from palladium. As there is no requirement to hallmark these items, the absence of a hallmark will not alert the consumer to the potential issues of either reduced metal content or a complete misdescription

   ii. items imported, perhaps from the Far East, bearing an indication of metal content - perhaps “Pd 950” or “PALL” without any independent verification of metal content

   iii. palladium articles passed off as platinum, if not hallmarked, with the bogus excuse that the item was made before 1975

   iv. items made of (cheaper) silver alloy to be passed off as palladium

d. The legitimate offering for sale of unhallmarked precious metal, which is considerably more valuable than silver, will make the logic of hallmarking harder to understand for the casual customer. There is no obvious logical justification for a compulsory requirement on silver, gold and platinum and a voluntary scheme for palladium.

4.4.2 Enforcement – Enforcement in a mixed regime will be problematic. The difficulty will lie in identifying unmarked goods as being of palladium. Increased enforcement activity can be expected as unscrupulous traders take advantage of the inability to recognise such goods but the increase is impossible to quantify.

4.4.3 Costs

4.4.3.1 The process of hallmarking carries economies of scale. This may be lost if hallmarking takes place at the end of the distribution chain rather than at the beginning. For example, the unit cost of marking 100 identical palladium articles is likely to be in the order of £0.66, while marking the same item as a one-off or a few-off would incur a cost of much more than that, and possibly up to the maximum unit price of £20. At this stage it is difficult to forecast if the requirement to hallmark would be driven by retailers or manufacturers.

4.4.3.2 The setting-up costs of creating the ability to hallmark palladium will have to be incurred and these are likely to be similar to those for a compulsory system. Both are offset to some extent by the fact that the equipment to analyse palladium is the same as that used for platinum.

4.4.3.3 The total costs of a voluntary system could be higher than those for a compulsory system even if fewer articles are actually marked because of the lack of economies of scale and because retailers do not necessarily have their own marks, so the total infrastructure costs may be higher if more marks are required, .

4.4.3.4 If palladium sales increase at the expense of white gold or platinum sales, the number of items hallmarked overall will be reduced. This would create an upwards pressure on hallmarking unit costs on gold, silver and platinum, where marking is compulsory.

4.4.4 TSD training – Trading Standards Officers would require training in the changes to the Hallmarking Act and in the identification of hallmarked palladium goods. Such training is already given by the assay offices, so additional costs associated with the prescription of palladium are expected to be minimal.

4.4.4.1 Statutory notices for dealers – s11 of the Hallmarking Act requires dealers to exhibit a BHC notice explaining and describing approved hallmarks. The notice will be amended to show the hallmark assigned to palladium. An estimated 800 dealers' notices will need to be replaced as a result at a one-off cost of £10 per item.

4.4.4.2 The additional costs associated with voluntary hallmarking are shown in row 2 of Table 1. The difference between them and the corresponding costs of compulsory marking are attributable to the lack of economies of scale and the detriment of buying undercarated items.

4.4.5 Benefits

4.4.5.1 The estimated increase in trade in palladium jewellery as a result of voluntary hallmarking. is shown in row 1 of Table 1.

4.4.5.2 When hallmarked, some palladium will displace some other hallmarked materials. However, there will be some intrinsic demand for hallmarked palladium jewellery, which is more than the demand for unhallmarked and which does not displace other hallmarked jewellery. As a result there is a net market expansion effect.

4.4.6 Assessment of Option 2

4.4.6.1 Table 1 shows that a voluntary hallmarking regime actually increases the burden on the industry. Voluntary hallmarking does not deliver a net positive benefit as a result of a more inefficient hallmarking process and a more inefficient application of and enforcement of the requirement to correctly describe palladium items. Voluntary hallmarking would also have the potential additional negative impact on the trade in the other precious metal jewellery as palladium would be the only metal to which voluntary hallmarking would be applied.

4.5 *Option 3 - Require precious metal articles containing palladium to be hallmarked under the Hallmarking Act.*

4.5.1 Consumer protection - Market dynamics and market failures

4.5.1.1 For the reasons set out above, the BHC expects that palladium will have similar features as other precious metals in the jewellery market but with the advantage of low density. Therefore, the same benefits that arise from the compulsory hallmarking of gold, platinum and silver will arise when palladium is added to the list. In an unregulated market for precious metal jewellery there are a number of market failures which are at least partially addressed by the requirement for hallmarking. These market failures mainly relate to the information asymmetry between the customer, the retailer and the manufacturer, as well as the potential information asymmetry between the general trading standards enforcement agency and others in the distribution chain.

4.5.1.2 The information asymmetry is primarily caused by the difficulty and expense that face any purchaser in the distribution chain in trying to validate claims for either the fineness of a particular metal or the composition of a particular item (e.g. solid precious metal compared to plated base metal). Hallmarking provides a cost effective way of eliminating this information problem and the results can be seen in the difference in market characteristics between hallmarking and non-hallmarking countries. In particular, the evidence available from the US market suggests very significant levels of under-carating compared to the UK market. The UK jewellery industry believes that trade in palladium jewellery is being held back by the information asymmetry. They believe that hallmarking will allow the trade to expand now that manufacturing problems have been resolved.

4.5.1.3 Compulsory hallmarking will increase consumer protection by removing information asymmetry from all non-exempt palladium goods. The problems stated in Option 2 (para 4.4.1 c) will be resolved.

4.5.2 Costs

4.5.2.1 Industry Table 1 shows the net benefits of a compulsory hallmarking regime based on estimates given by the British Hallmarking Council and the British Jewellers' Association. Compulsory marking not only has economies of scale, it is also likely to increase demand. Figure 1 below shows how the demand for platinum took off when the conditions were right.

4.5.2.2 TSO Training costs - Trading Standards Officers would require training in the changes to the Hallmarking Act and in the identification of palladium goods. Such training is already given by the assay offices, so additional costs associated with the prescription of palladium are expected to be minimal.

4.5.2.3 Enforcement costs – these are the costs related to finding goods in the market place that purport to be palladium but do not comply with the requirements of the HMA. An increase in fraudulent goods could be expected while consumers are still naïve about palladium jewellery but it is difficult to estimate if there will be an increase in the total number of precious metal offences or just a change in the numbers relative to the different types of white metal.

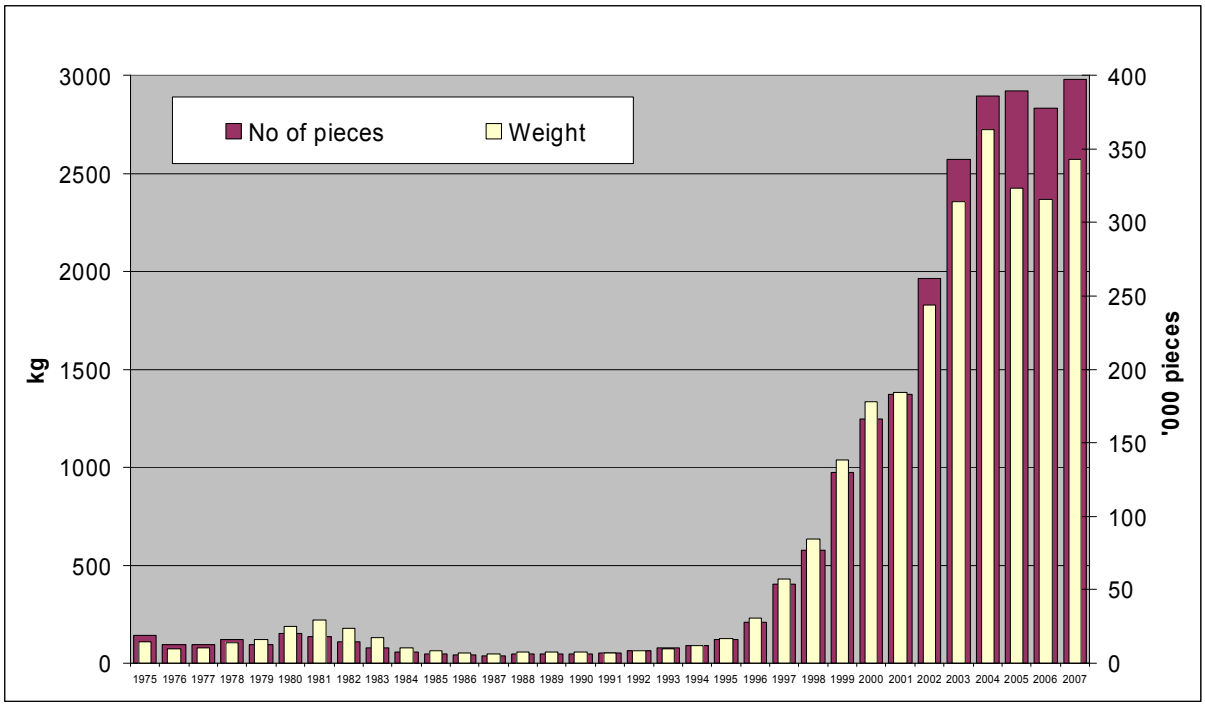

Figure 1: History of platinum sales since it became a prescribed precious metal.

4.5.2.4 **Statutory notices for dealers** – section 11 of the Hallmarking Act requires dealers to exhibit a BHC notice explaining and describing approved hallmarks. The notice will be amended to show the hallmark assigned to palladium. An estimated 800 dealers' notices will need to be replaced as a result at a cost of £10 per item.

4.5.3 Benefits

4.5.3.1 The financial benefit of compulsory marking are an increase in trade due to increased consumer confidence, a reduction in the detriment of buying undercarated items and lower hallmarking charges than for a voluntary system due to economies of scale.

4.5.3.2 Feedback from the public consultation showed that one manufacturer expected his sales volume (number of palladium articles) five years after prescription to increase to 27 times his current volume. Another expected the value of his sales to increase 17-fold.

4.5.3.3 The non-financial benefits are:

a. the provision of an effective consumer protection mechanism concerning palladium jewellery, which will also provide reassurance to dealers and retailers

b. enhanced confidence for consumers that they are actually buying jewellery - or other items - made from a precious and valuable metal

c. enhanced volumes and/or prices available for UK manufacturers and dealers and retailers in palladium jewellery. The consumer is likely to pay more and buy more palladium jewellery if they can be certain that the jewellery is not under-carated or misdescribed.

d. the retention of a comprehensive hallmarking system for precious metals in the UK.

4.5.3.4 It should be appreciated that globalisation has affected the UK jewellery market such that presently about 75% of all the jewellery sold in the UK is imported. The BHC believes that within 15 years a significant part - perhaps up to 5% - of all jewellery purchased in the UK will be palladium. Already manufacturers outside the UK - three wedding ring manufacturers in the US, four watch case manufacturers and one ring manufacturer in Switzerland and ring manufacturers in Germany are in production, and the proposed measure will help UK manufacturers compete in the market, because of the beneficial effect that hallmarking has upon saleability both within the UK and in export markets.

4.5.3.5 In addition to the benefits outlined above the full integration of palladium into the precious metal jewellery market will provide consumers with an increased range of precious metal jewellery. This increase in the range of jewellery available is, from a consumer perspective, a benefit independent of any additional total growth in the precious metal jewellery market.

4.5.3.6 It is instructive to review the introduction of platinum to the hallmarking regime in 1975. Figure 1 below shows the demand for platinum items from 1975 to 2007. As can be seen it was not until around 1995 that demand for platinum jewellery took off. Prior to 1995 demand was at a fairly constant, but low, level (around 8,000 pieces per annum – with a peak of around 25,000 pieces per annum in the early 1980s). Demand for specific precious metal jewellery is driven by a combination of fashion, relative prices and overall demand for jewellery. Platinum, which now has a relatively high demand (300,000 – 400,000 pieces pa) and a clear justification for hallmarking in terms of the value of the metal at risk from undercarating, has taken some time to reach these levels of demand. There is no reason the think that the same market dynamics would not apply to palladium. Indeed, given the recent increases in the underlying metal prices, the demand for palladium jewellery may accelerate faster than that experienced by platinum.

4.5.4 Assessment of Option 3

4.5.4.1 Table 1, row 4, shows that a compulsory hallmarking regime provides a net benefit to the industry. This is as a result of increased trade due to increased consumer confidence in the product bought by consumers.

5. RISK, UNCERTAINTY & UNINTENDED CONSEQUENCES

5.1 Option 1 No intervention

5.1.1 The risks associated with not regulating palladium are:

a. A general misdescription of palladium items or items purporting to be made from palladium. As there is no formal requirement to hallmark these items, the absence of a hallmark will not alert the consumer to a reduced palladium content or a complete misdescription. A consumer wishing to verify either the type or the fineness of the metal in an item of jewellery would need to spend considerably more than the cost involved in hallmarking such an item Evidence available from the US market, which has a voluntary hallmarking regime, suggests very significant levels of under-carating compared to the UK regulated market

b. Palladium articles passed off as platinum, if not hallmarked, with the bogus claim that the item was made before 1975.

c. Items of silver alloy passed off as palladium. Palladium is more expensive than silver and looks similar to non-expert customers; the lack of a hallmark requirement for palladium will provide an incentive for fraud.

d. Damage to the integrity and effectiveness of the UK hallmarking system through the existence in the market of a popular precious metal not encompassed by regulation, whereas some cheaper precious metals are.

5.2 Option 2 Voluntary palladium identification marking

5.2.1 The risks associated with voluntary marking are the same as those for Option 1 because there will be a mixture of legitimate hallmarked and unhallmarked articles in the market place.

5.3 Option 3 Require precious metal articles containing palladium to be hallmarked under the Hallmarking Act.

5.3.1 The risk associated with compulsory hallmarking is that the imposition of the cost of hallmarking will have an adverse effect on sales. In fact, as previously indicated, the expectation is that hallmarking will enhance sales. There is no evidence to show that the cost of hallmarking has the effect of reducing sales to the consumer as a result of price increase. In fact, the responses to the consultation supported the view that hallmarking would be more likely to help to boost sales through quality assurance.

5.4 Uncertainties

5.4.1 There is no guarantee that prescribing palladium will lead to an increase in sales of palladium jewellery. However, under these circumstances the costs of Option 3 are minimal. The fixed costs of the proposals relate to the costs of modifying the retailers' notices, design of the hallmarks and any fixed costs associated with ensuring that the assay offices can assay for palladium. The latter are minimal as the technology used is the same as that for platinum and they already have this.

5.5 Unintended consequences

5.5.1 There could be a significant decrease in sales of white gold jewellery if palladium jewellery becomes very popular - estimates received by the consultation varied between 5% - 20%. . This risk is understood and willingly assumed by the UK jewellery industry because the fall of trade in one will be balanced by the increased trade of the other. In fact, one designer thought that new markets would emerge because the lightness of palladium would lead to larger and possibly more-exotic designs.

6. OTHER ECONOMIC ISSUES

6.1 The full checklist at http://www.berr.gov.uk/files/file44548.pdf poses the following questions:

a. Will the proposal bring receipts or savings to Government? Ans – it is thought there will be a net benefit to Government in the form of increased taxation receipts resulting from an increase in jewellery sales.

b. Will it impact on costs, quality or availability of goods and services? Ans – no, it should be neutral.

c. Will it impact on the public sector, the third sector, consumers? Ans – it will give consumers a greater choice of jewellery.

d. Will the proposal result in new technologies? Ans – no, the expected increase in palladium jewellery sales will be a direct result of technological improvements.

e. Will the proposal result in a change in the investment behaviour both into the UK and UK firms overseas and into particular industries? Ans – no.

7. IMPLEMENTATION

7.1 NMO is responsible for implementing the amendment to add palladium as a precious metal to the Hallmarking Act.

7.2 The timetable for implementation is:

- Oct 08 Issue public consultation document & draft SI
- Jan 08 Assess consultation responses & revise draft SI as appropriate
- May 09 Submission to Minister for approval & signature
- Autumn 09 Legislation comes into force

8. MONITORING

8.1 For each of its meetings, the British Hallmarking Council receives reports from each assay office of the numbers of articles of each type of precious metal stamped by it in the preceding period together with reports of trading standards activity. Such reports will provide an effective monitoring process to determine the effect of regulating palladium on both market activity and enforcement.

9. ENFORCEMENT

9.1 The requirements of the Hallmarking Act are primarily enforced by Local Weights and Measures Authorities. This will continue to be the case when the Act is applied to palladium. Additional awareness and familiarisation training may be required for Trading Standards Officers but this should be minimal as they currently enforce the Act for gold, silver and platinum..

10. SANCTIONS

10.1 Misdescriptions of palladium items under Option 3 will become criminal offences under section 1 of the Hallmarking Act and the penalties are stated in Schedule 3 of the Act. Section 1 also falls within the remit of the Regulatory Enforcement and Sanctions Bill.

11. TRANSPOSITION OF EU DIRECTIVES

11.1 Not applicable. This is a simple amendment to UK legislation.

12. CARBON IMPACT ASSESSMENT

12.1 The carbon impact will increase only if there is a net increase in the use of precious metal for jewellery, i.e. if the increase in the quantity of palladium used exceeds the decrease in the quantity of other precious metals. The carbon impact is likely to be greatest in those countries where the palladium ore is mined and refined. The carbon impact in the UK is likely to be small and is impossible to estimate given the unknown size of the future market.

13. COMPETITION ASSESSMENT

13.1 The OFT competition filter (http://www.oft.gov.uk/advice_and_resources/resource_base/guidelines/) asks the following four questions – would the proposal:

a. Directly limit the number or range of suppliers?

Answer: No; it will not involve:

- the award of exclusive rights to supply, or
- procurement from a single supplier or restricted group of suppliers, or
- the creation of a form of licensing scheme, or
- a fixed limit (quota) on the number of suppliers.

b. Indirectly limit the number or range of suppliers?

Answer: No; it will not raise the costs of:

- new suppliers relative to existing suppliers,
- some existing suppliers relative to others, or
- entering or exiting an affected market.

As far as jewellers are concerned, palladium is just another type of precious metal jewellery to be sold. Palladium uses the same assay techniques as platinum, which is already regulated, so the regulating of palladium will not affect assay offices.

c. Limit the ability of suppliers to compete?

This is likely to be the case if the proposal:

- controls or substantially influences
  - the price(s) a supplier may charge – Answer: hallmarking may slightly increase charges
  - the characteristics of the product(s) supplied, for example by setting minimum quality standards – Answer: hallmarking denotes both type of metal and purity
- limits the scope for innovation to introduce new products or supply existing products in new ways – Answer: increases the scope for innovation due to palladium's low density,
- limits the sales channels a supplier can use, or the geographic area in which a supplier can operate – Answer: no effect,
- substantially restricts the ability of suppliers to advertise their products – Answer: no effect, or
- limits the suppliers' freedoms to organise their own production processes or their choice of organisational form – Answer: no effect.

d. Reduce suppliers' incentives to compete vigorously?

This may be the case where a proposal:

- exempts suppliers from general competition law – N/A,
- introduces or amends intellectual property regime – N/A,
- requires or encourages the exchange between suppliers, or publication, of information on prices, costs, sales or outputs – N/A, or
- increases the costs to customers of switching between suppliers – N/A.

14. AVERAGE ANNUAL COST PER ORGANISATION

14.1 The organisations affected by this proposal are manufacturers, assay offices, retailers and Trading Standards. Assay offices tend to fall into the small businesses category (Table 2), whereas manufacturers and retailers could fall into any category from sole trader to large business.

Definition	Company size	Consultation response (number of companies)
Sole Trader	1	14%
Micro	1 – 9	14%
Small	10 - 49	43%
Medium	50-249	14%
Large	250+	14%

Table 2: Company size definition

14.2 Because these organisations are already working with the other prescribed precious metals, the additional costs specific to palladium are expected to be negligible (Table 3):

- Retailers – one-off cost of £10 for revised statutory notice.
- Assay offices – no new assay equipment will be required so the proposal is not expected to introduce additional costs.

Type of organisation	First-year cost per organisation/outlet	Average annual cost per organisation thereafter
Sole trader / micro business	£10	Nil
Small, medium or large business	£10	Nil

Table 3: Average annual costs per organisation

15. ADMIN BURDENS AND IMPACT ASSESSMENT

15.1 Administrative burdens are administrative activities that businesses conduct only because regulation requires it. Because gold, silver and platinum are already prescribed, the additional prescription of palladium should not add an extra administrative burden.

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	*Results in Evidence Base?*	*Results annexed?*
Competition Assessment	Yes	No
Small Firms Impact Test	No	Yes
Legal Aid	No	Yes
Sustainable Development	No	Yes
Carbon Assessment	Yes	Yes
Other Environment	No	Yes
Health Impact Assessment	No	Yes
Race Equality	No	Yes
Disability Equality	No	Yes
Gender Equality	No	Yes
Human Rights	No	Yes
Rural Proofing	No	Yes

Annexes

ANNEX A - SMALL FIRMS IMPACT TEST

This may be found at http://www.berr.gov.uk/files/file41289.doc

Checklist

A. At an early stage in the Impact Assessment preparation make a preliminary assessment of businesses likely to be affected:

☐ Does the regulation apply to small businesses or affect the business environment in which they operate? If "yes" then the presumption should be that costs will fall disproportionately on SME's and the process should move to step B.

Answer: Yes

☐ What are the characteristics of businesses likely to be affected? – For example, number of businesses, size, ownership type (sole proprietor, partnership, Ltd, etc), geographic distribution?

Answer: Most of the business will be in the sole traders, micro businesses and small business categories but the size distribution is unknown. Geographic distribution – throughout the UK

B. Assess alternative options

☐ Consider whether a complete or partial exemption would be appropriate for micro and small businesses.

Answer: No

☐ Identify alternative options for achieving objectives, based on feedback from previous consultations and other research.

See answer to C below.

C. Scope issues with a representative sample of small businesses:

☐ Contact a reasonable number (e.g. 10) of representative businesses.

☐ Obtain feedback about the likely effects of the proposal:

- How serious is the problem the proposal seeks to address?
- What changes will you have to make to the way businesses have to operate?
- What are the likely approximate costs and benefits of the proposal for business?
- Are there other ways (apart from regulation) that the Government could achieve its objective e.g. such as exemptions?

Answer: The appropriate trade associations have been approached and welcome the regulatory proposal as they believe it will increase the trade in palladium jewellery.

D. Determine if there is likely to be a greater impact on the operations and performance of small business than others:

☐ It is normal for the impact of measures to bear more heavily on small businesses because they do not enjoy the economies of scale of larger firms. Proceed with the next stage of the small businesses analysis.

Answer: Impact will be minimal because precious metals are already regulated.

☐ If no, still consider whether a small business exemption is feasible. Prepare draft IA for public consultation, including details of preliminary soundings.

E. Gather detailed data about likely impacts on small businesses as part of the wider consultation including costings:

☐ Contact a wider sample of representative businesses.

☐ Obtain feedback about likely effects of proposal, including estimates of costs and benefits that can withstand external scrutiny.

☐ Consider again if the proposal will have a greater effect on small business.

☐ Compare cost and benefit implications with those of the proposal.

Answer: The public consultation specifically asked if prescription would have an inhibiting or enabling effect on small businesses. The small businesses did not see themselves as being disproportionately disadvantaged and thought that prescription would have no effect or an enabling effect. The respondents did not give financial figures but one manufacturer expected his sales volume (number of palladium articles) five years after prescription to increase to 27 times his current volume whereas another expected the value of his sales to increase 17-fold.

ANNEX B - LEGAL AID IMPACT TEST

No new criminal sanctions or civil penalties will be introduced by this proposal.

ANNEX C - OTHER ENVIRONMENTAL ISSUES

The checklist from Defra's website (http://www.defra.gov.uk/corporate/regulat/impact-assessment/envguide/checklist.htm) is:

1. Will the policy option lead to a change in the emission of greenhouse gases? No, any change due to an increase in metal extraction and refining will be small.

2. Will the policy option be vulnerable to the predicted effects of climate change? No, climate changes in the UK or in countries where the palladium ore is extracted or processed is unlikely to have any effect on the palladium jewellery market.

3. Will the policy option lead to a change in the financial costs or the environmental and health impacts of waste management? No, there will be no waste generated in the UK.

4. Will the policy option impact significantly on air quality? No, there will be no effect on air quality.

5. Will the policy option involve any material change to the appearance of the landscape or townscape? No.

6. Will the proposal change 1) the degree of water pollution, 2) levels of abstraction of water or 3) exposure to flood risk? No.

7. Will the policy option disturb or enhance habitat or wildlife? No.

8. Will the policy option affect the number of people exposed to noise or the levels to which they're exposed? No.

ANNEX D - HEALTH IMPACT ASSESSMENT

The anwers to the screening questions on health impact assessment at http://www.dh.gov.uk/en/Publicationsandstatistics/Legislation/Healthassessment/DH_4093617 were all negative. There is no evidence that palladium jewellery affects human health.

ANNEX E - RACE EQUALITY, GENDER EQUALITY, HUMAN RIGHTS

The more widespread use of palladium jewellery is unlikely to affect these areas.

ANNEX F - RURAL PROOFING

The Countryside Agency's rural proofing checklist has been scrutinised (http://www.ruralcommunities.gov.uk/projects/ruralproofing/overview). No instance of the proposed changes has beenindentified as having an impact on rural communities. Jewellery manufacture is not sensitive to location of manufacturers except that proximity to assay offices helps to reduce transport costs. Prescribing palladium will not affect rural needs and circumstances.

ANNEX G - SUSTAINABLE DEVELOPMENT

Defra's interactive policy tool "stretching the web" (http://www.defra.gov.uk/sustainable/think/stretch/index.htm) showed the impact of the greater use of palladium jewellery on sustainable development to be neutral for environmental, economic and social impacts.