

<b>Title:</b> <b>Banning the sale of ivory in the UK.</b> <b>IA No:</b> <b>RPC Reference No:</b> <b>Lead department or agency:</b> Defra <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>			
	Date: 05/09/2017			
	Stage: Consultation			
	Source of intervention: Domestic			
	Type of measure: Primary legislation			
	Contact for enquiries: International Team DEFRA			

**Summary: Intervention and Options** **RPC Opinion: GREEN**

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANDCB in 2014 prices)	One-In, Three-Out	Business Impact Target Status
n/q	n/q	n/q	In scope	

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

Elephants are being poached and killed at unsustainable rates for their ivory. Although international conventions outlaw trade in recently poached ivory, the illegal trade and poaching has increased since 2007. UK government intervention is necessary because international and domestic markets are not factoring in the total value of elephants to society or long-term conservation. The expectation is that the renewed UK leadership in this area and a commitment to close all legal ivory markets would reduce the demand for ivory and thus the incentive to poach. It would also close loopholes in current legislation which present opportunities to launder poached ivory through legal markets, thereby indirectly encouraging continued poaching of elephants. Only government can send a clear global signal that the trade in ivory is not acceptable and that the killing of elephants for their ivory will not be tolerated.

**What are the policy objectives and the intended effects?**

1) Ensure the UK plays a leading role in ending the illegal trade in ivory. A total ban of UK sales of ivory that contribute directly or indirectly to elephant poaching would send the clearest possible signal that the UK does not tolerate the poaching of elephants for their ivory and demonstrates that we are world leaders in the fight against the ivory trade. Renewed UK leadership in this area will help encourage other countries to close their markets, reduce demand and stop poaching.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

**Option 1:** Proposal for a total ban on ivory sales in the UK, and proposal to prohibit the import and export of ivory for sale to and from the UK, including intra-EU trade to and from the UK.

**Option 2:** As Option 1 with strictly limited, carefully targeted exemptions. We plan to consult with interested parties on the scope of these exemptions and how they could operate and be enforced.

Option 2 is the preferred option. The consultation will be used to provide further evidence.

Policy options are assessed against the “do nothing” option of retaining the status quo. Currently, the international trade in ivory is controlled by rules set by the Convention on the International Trade in Endangered Species (CITES). These rules are implemented in the UK through EU wildlife Regulations.

<b>Will the policy be reviewed? It will/will not be reviewed. If applicable, set review date: Month/Year</b>					
Does implementation go beyond minimum EU requirements?			Yes		
Are any of these organisations in scope?		Micro Yes	Small Yes	Medium Yes	Large Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			Traded: n/a		Non-traded:

***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 SELECT SIGNATORY: \_\_\_\_\_ Date: \_\_\_\_\_

# Summary: Analysis & Evidence Policy Option 1

**Description:** Proposal for a total ban on ivory sales in the UK, and proposal to prohibit the import and export of ivory for sale to and from the UK, including intra-EU trade to and from the UK.

Price Base Year	PV Base Year n/a	Time Period Years n/a	Net Benefit (Present Value (PV)) (£m)		
			Low:	High:	Best Estimate: n/q

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			
High			
Best Estimate			n/q

## Description and scale of key monetised costs by 'main affected groups'

No costs have been monetised because of insufficient data at this stage. See main text for a description of the sectors affected. We will use the consultation to consider evidence about monetised costs, recognising that a robust assessment will be very challenging to make in view of the data gaps and heterogeneous nature of the antiques sector.

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

There are at least 1,600 antique dealers, 1,000 auction houses and 1,300 galleries in the UK, most of whom will deal in ivory to some extent. Some private individuals would also be affected, particularly those who have invested in, or inherited, works of antique ivory.

They will lose sales and stock value from a ban. Professional musicians and museums may also be potentially affected. Individuals that own ivory products will lose potential resale value of ivory-containing items. There may be some additional costs of enforcement, which would fall on the taxpayer.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			
High			
Best Estimate			n/q

## Description and scale of key monetised benefits by 'main affected groups'

In view of the nature of the policy objectives and data limitations, benefits are not monetised. We will use the consultation to consider evidence on monetised benefits.

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

Benefits are assessed relative to a do-nothing baseline.

The UK has had a leading role in preserving international biodiversity. Contributing to save wild elephants will have a direct beneficial effect on our international reputation. There will be the direct "utility" or welfare benefit that UK citizens will gain from the knowledge that the UK policy is playing its maximum part to bring an end to the illegal trade in ivory that is killing African elephants.

Indirect benefits are UK eco-tourism businesses, particularly those specialising in safaris, stand to benefit from the increased awareness and interest in elephants that a ban will bring and also businesses that can provide substitutes to ivory will be able to seek new opportunities.

Key assumptions/sensitivities/risks	Discount rate	3.5
<p>A key assumption is that other countries will be positively influenced by the UK lead and implement their own bans. The bans will reduce demand, which, in turn, reduce prices and the incentive to poach and kill elephants.</p> <p>Uncertainties relating to the impact of this option on parts of the UK arts and antiques markets. In order robustly to assess impacts, information will be required on for instance, numbers and size of firms affected, share of their turnover represented by ivory, breakdown of sales by age, item, weight etc. stocks of ivory held by firms and households, adaption. The risk of unintended consequences of a complete ban will be minimized through an open approach to consultation on which sectors might be affected.</p> <p>The illegal ivory trade, like other illicit trades, fuels corruption and instability, particularly in developing countries. We assume there will be full compliance with the regulation.</p>		

**BUSINESS ASSESSMENT (Option 1)**

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>Score for Business Impact Target (qualifying provisions only) £m:</b>
<b>Costs:</b>	<b>n/q</b>	<b>Benefits: 0.0</b>	
		<b>Net:</b>	<b>n/q</b>

## Summary: Analysis & Evidence Policy Option 2

Description: **As Option 1 but with some limited and carefully targeted exemptions**

Price Base Year	PV Base Year n/a	Time Period Years n/a	Net Benefit (Present Value (PV)) (£m)		
			Low:	High:	Best Estimate: n/q

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			
High			
Best Estimate			n/q

### Description and scale of key monetised costs by 'main affected groups'

No costs have been monetised because of insufficient data at this stage. See main text for a description of the sectors affected. We will use the consultation to consider evidence about monetised costs, recognising that a robust assessment will be very challenging to make in view of the data gaps and heterogeneous nature of the antiques sector.

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

There are at least 1,600 antique dealers, 1,000 auction houses and 1,300 galleries in the UK, most of whom will deal in ivory to some extent. Some private individuals would also be affected, particularly those who have invested in, or inherited, works of antique ivory. They will lose sales and stock value from a ban. Costs would be limited by limited and carefully targeted exemptions in the following areas: musical instruments; items of significant artistic, cultural or historic value; items containing only a small proportion of ivory (a "de minimis" exemption); and sales to and between museums. How these would function is to be explored through the consultation. Individuals that own (or expected to inherit) ivory products not covered by the exemptions will lose potential resale value of ivory-containing items.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			
High			
Best Estimate			n/q

### Description and scale of key monetised benefits by 'main affected groups'

In view of the nature of the policy objectives and data limitations, benefits are not monetised. We will use the consultation to consider evidence about monetised benefits.

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

Benefits are assessed relative to a do-nothing baseline.

The UK has had a leading role in preserving international biodiversity. Contributing to save wild elephants will have a direct beneficial effect on our international reputation. There will be the direct benefit that UK citizens will gain from the knowledge that the UK is playing its part to bring an end to the illegal trade in ivory that is threatening to bring extinction to African elephants.

Indirect benefits are UK eco-tourism businesses, particularly those specialising in safaris, stand to benefit from the increased awareness and interest in elephants that a ban will bring and also businesses that can provide substitutes to ivory will be able to seek new opportunities.

The illegal ivory trade, like other illicit trades, fuels corruption and instability, particularly in developing countries.

Key assumptions/sensitivities/risks (%)	Discount rate	3.5
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A key assumption is that other countries will be positively influenced by the UK lead and implement their own bans, which will reduce demand, prices and therefore poaching and killing of elephants.

Uncertainties relating to the impact of this option on parts of the UK arts and antiques markets. In order robustly to assess impacts, information will be required on for e.g. numbers and size of firms affected, share of ivory in the trade, breakdown of sales by age, item, weight etc. stocks of ivory held by firms and households, adaption.

A risk with this option is that exempted activity or products, if not strictly limited and targeted, undermine the intended effects of signalling an end to trade in ivory.

We assume there will be full compliance with the regulation.

**BUSINESS ASSESSMENT (Option 2)**

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>Score for Business Impact Target (qualifying provisions only) £m:</b>
<b>Costs:</b> n/q	<b>Benefits: 0.0</b>	<b>Net:</b>	
			n/q

# Consultation stage impact assessment – Banning sales of ivory in the UK

## Evidence base (for summary sheets)

### Introduction

1. This Impact Assessment sets out Defra's preliminary assessment of the case banning UK sales of ivory that contribute directly or indirectly to elephant poaching, with the ultimate aim of addressing the decline in the number of wild elephants.
2. It sets out both a strong moral case and an economic rationale for the UK to show international leadership in this area. On the other hand, it recognises that information is limited regarding the domestic business implications of ending the trade in ivory. A robust assessment of costs will be very challenging.
3. This Impact Assessment accompanies the Consultation Document, which sets out the proposal to ban UK sales of ivory, with or without exemptions, and calls for evidence on the benefits and costs of those proposals. The preferred option is for a ban with limited and carefully targeted exemptions.

### Problem under consideration

4. The UK is already bound by international rules on the trade of ivory, through the Convention on the International Trade in Endangered Species (CITES). CITES is an international conservation agreement which aims to ensure that trade in endangered species does not threaten their survival.<sup>1</sup>
5. In recognition that they are threatened with extinction, the African (*Loxodonta Africana*) and Asian (*Elephas Maximus*) elephants are listed in CITES Appendix I, affording them the highest level of protection under CITES. The exceptions to this are the elephant populations of South Africa, Namibia, Botswana and Zimbabwe, which are currently listed on CITES Appendix II because they have large and/or stable populations. However, these four populations have an annotation placing the equivalent of Appendix I rules on international trade in their ivory. These Appendix listings afford elephants the highest level of protections under CITES.
6. The commercial use of ivory is prohibited under the CITES Convention and associated EU Regulations (commonly referred to as EU Wildlife Trade Regulations); however, the relevant

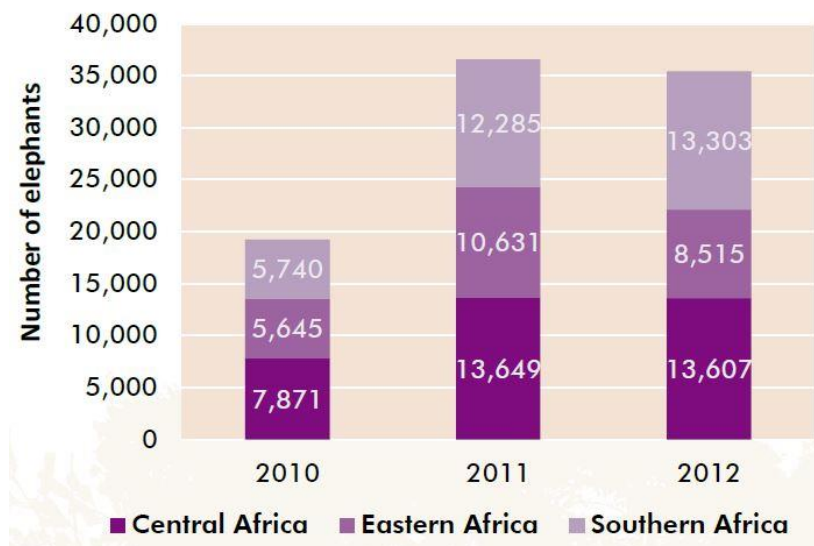
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<sup>1</sup> The convention entered into force in 1975 and was ratified by the UK in 1976. CITES is implemented in the European Union primarily through Council Regulation (EC) No. 338/97 on the protection of species of wild fauna and flora by regulating trade, and Commission Regulation (EC) No. 865/2006, which lays down the detailed rules concerning implementation of Council Regulation No. 338/97. Together these regulations establish the legal framework within which the UK must implement its CITES obligations. The EU Regulations are directly applicable in all Member States. However there are certain areas, such as enforcement, where the EU Regulations require national measures, or where Member States retain the power to adopt additional measures. These are currently enacted in UK law by the Customs and Excise Management Act 1979, the Control on Trade in Endangered Species (Enforcement) Regulations 1997 and the Control on Trade in Endangered Species (Ports of Entry) Regulations 1985, and by various Statutory Instruments amending the COTES Regulations. Defra and its Executive Agency, Animal and Plant Health Agency are the UK CITES Management Authority and are responsible for ensuring that CITES is properly implemented in the UK through a licensing regime.

Management Authority may issue certificates which provide an exemption from the prohibition if certain grounds are satisfied – this must be on a case by case basis.

7. The commercial use of ivory specimens acquired before the date on which the provisions of CITES started to apply to ivory is permitted (1990 for African elephant ivory and 1975 for Asian elephant ivory) only if the necessary permits have been issued.
8. Despite these measures, trade in ivory and elephant poaching have increased significantly since 2007. The poaching of some African elephants has reached an unsustainable level. Numbers of savannah elephants declined by 30 percent (equal to 144,000 elephants or 8% per year) between 2007 and 2014.<sup>2</sup> According to the International Union for Conservation of Nature, the population of African elephants is down to around 415,000 - 550,000.<sup>3</sup>
9. The natural reproduction rate of elephants is about 5% per year. Therefore the rate of decline is clearly unsustainable. Elephant population surveys estimate that, without changes, some populations face the risk of local extinction.<sup>4</sup> Figure 1 shows estimates of the numbers poached for 2010-12 by region in Africa.

Figure 1. Estimated Number of Elephants Poached in Africa by Region<sup>5</sup>



10. Local communities in Africa have little incentive to protect these animals which are often considered pests because of the damage they can cause to homes and farmland.<sup>6</sup> Elephants are threatened by increasing loss of habitat as a result of rapid human population growth and

<sup>2</sup> Chase MJ, Schlossberg S, Griffin CR, Bouché PJC, Djene SW, Elkan PW, Ferreira S, Grossman F, Kohi EM, Landen K, Omondi P, Peltier A, Selier SAJ, Sutcliffe R. (2016) Continent-wide survey reveals massive decline in African savannah elephants. PeerJ 4:e2354 <https://doi.org/10.7717/peerj.2354>

<sup>3</sup> <https://www.iucn.org/news/species/201609/poaching-behind-worst-african-elephant-losses-25-years-%E2%80%93-iucn-report>

<sup>4</sup> Chase MJ, Schlossberg S, Griffin CR, Bouché PJC, Djene SW, Elkan PW, Ferreira S, Grossman F, Kohi EM, Landen K, Omondi P, Peltier A, Selier SAJ, Sutcliffe R. (2016) Continent-wide survey reveals massive decline in African savannah elephants. PeerJ 4:e2354 <https://doi.org/10.7717/peerj.2354>; [https://cites.org/eng/news/pr/some\\_positive\\_signs\\_african\\_elephants\\_continue\\_face\\_serious\\_threats\\_280716](https://cites.org/eng/news/pr/some_positive_signs_african_elephants_continue_face_serious_threats_280716)

<sup>5</sup> UNODC (2016) *World Wildlife Crime Report: Trafficking in Protected Species*

<sup>6</sup> Taruvinga A and Mushunje A: Society's perceptions of African elephants and their relative influence towards the conservation of elephants. APCBEE Procedia 10 ( 2014 ) 299 – 304

agricultural expansions. 29% of the existing elephant range is affected by this problem and the projections are that this figure may increase to 63% by 2050.<sup>7</sup>

11. At the same time, the high price of ivory on the illegal market provides a strong incentive for poachers to kill wild elephants.<sup>8</sup> This increase in illicit trade has been attributed to the increased demand for ivory in Asian markets<sup>9</sup>, mainly China and Thailand.
12. Evidence suggests that the illicit ivory trade is increasingly in the hands of organised crime.<sup>10</sup> Over recent years, the number of ivory seizures and also their average size has increased. Shipments of over one hundred kilograms of raw ivory have become more common since 2007,<sup>11</sup> suggesting that illicit trade is increasingly in the hands of powerful organisations, who smuggle container-loads of ivory at a time. The presence of such powerful groups can undermine state authority and an economy's tax base. These criminal organisations not only threaten wild elephant populations but also the stability of the countries where they operate.
13. In response to the current poaching crisis, several countries have imposed stricter measures on the ivory trade in an effort to preserve wild elephants. In February 2015 China – the world's largest market for ivory - imposed a one year ban on the import of African elephant ivory carvings (not including pre-Convention items) and from March 2016 the ban also included pre-Convention tusks, ivory products and hunting trophies. China has now announced plans to close its domestic trade in ivory, shutting ivory carving factories and shops, by the end of 2017.
14. In June 2016, the USA introduced new restrictions on imports and exports of ivory items and banned trade between States for antiques less than a hundred years old. In June 2016, Hong Kong proposed to phase out domestic ivory trade in five years and banned international trade of pre-Convention ivory. In Europe, France and Germany no longer issue re-export certificates for pre-Convention raw ivory and in January 2014 the European Parliament called on Member States to "*introduce moratoria on all commercial imports, exports and domestic sales and purchases of tusks and raw and worked ivory products until wild elephant populations are no longer threatened by poaching*".
15. In May 2017, the European Commission published guidelines recommending Member States suspend re-exports of raw ivory to non-EU countries from 1 July 2017, and ensure a strict interpretation of the provisions in EU law relating to intra-EU trade in ivory and the (re)export of worked ivory. The Commission will shortly be consulting on the nature of the EU ivory trade, to inform development of possible additional measures at EU level.

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<sup>7</sup> See [www.globio.info](http://www.globio.info) and

[https://cites.org/eng/news/pr/some\\_positive\\_signs\\_african\\_elephants\\_continue\\_face\\_serious\\_threats\\_280716](https://cites.org/eng/news/pr/some_positive_signs_african_elephants_continue_face_serious_threats_280716)

<sup>8</sup> The price of a kilogram of raw ivory in China rose from \$750 (£437) in 2010 to \$2,100 (£1225) in 2014 and an elephant tusk can weigh 5-10 kg and in some cases even more. The price of ivory has, however, dropped to \$730 in February 2016 with the announcement of the Chinese ban on ivory from 2017. Source: "[Analysis of demand-side reduction initiatives](#)" The Royal Foundation, 2014 and "[Decline in the legal ivory trade in China in anticipation of a ban](#)" by Vigne, L and Martin, E, Save the Elephant (2017) for the latest data.

<sup>9</sup> Milliken, T., Burn, R.W., Underwood, F.M. and Sangalakula, L. (2012). [The Elephant Trade Information System \(ETIS\) and the Illicit Trade in Ivory: A report to the 16th meeting of the Conference of the Parties to CITES](#). CoP16 Doc. 53.2 (Rev. 2) page 14. CITES, Geneva, Switzerland.

<sup>10</sup> Elements of this supply chain are criminal syndicates and rebel militias engaged in many other criminal activities. See Underwood FM, Burn RW, Milliken T (2013) Dissecting the Illegal Ivory Trade: An Analysis of Ivory Seizures Data. PLoS ONE 8(10): e76539. doi:10.1371/journal.pone.0076539

<sup>11</sup> T. Milliken, R.W. Burn, F.M. Underwood and L. Sangalakula: "Monitoring of illegal trade in ivory and other elephant specimens". Report presented to CITES Sixteenth Meeting of the Conference of the Parties. Bangkok (Thailand), March 2013.



16. In global terms, the UK ivory market, albeit for antique ivory, is surprisingly large. This stems from the widespread production and import of elephant ivory for personal and household products in nineteenth century Britain, as well as traditional decorative uses. In a survey of 2004, the UK had the greatest number of outlets openly selling ivory products in the world, and ranked ninth in terms of the numbers of items available.<sup>12</sup>
17. Whilst most of the UK's ivory trade is legal, the UK has featured in several "cluster analyses" of ivory seizure data by CITES' "Elephant Trade Information System" (ETIS) since 2002, suggesting that "the UK has consistently played a role in illegal ivory trade globally". Between 2010 and 2014, some 154 seizure records were reported by the UK to ETIS, a considerable increase on the previous five year period, although less in volume terms than Germany and France. Seizures were made not only in the UK, but also in other countries that involved the UK either as a country of export, re-export, transit, or destination.<sup>13</sup> However, the importance of taking action on the UK domestic ivory market goes beyond its current weight in ivory trade flows: it would send the clearest possible signal that the UK does not tolerate the sale of ivory and takes the strongest possible position against the ivory trade. This will enable the UK to influence other countries, especially those with larger ivory markets, to take action; and to remove any basis of the currently legal ivory trade providing a cover for illegal trade.<sup>14</sup>

## Rationale for government intervention

18. Although the purpose of the intervention is moral and geopolitical, and so not primarily economic, there is an economic rationale for government intervention as the market fails appropriately to protect elephants. Elephants are not being protected to the extent expected by UK citizens and required to maintain sustainable population levels. The relevant market failures are open-access resources, externalities, and asymmetric information.

### *Open Access Resources*

19. Elephants are being killed at a rate which is unsustainable and can lead to the extinction of African elephant populations. In this way, the African savannah elephant population has some characteristics of an open-access resource. This is when too much of the resource is being harvested for private gain, ignoring the long-term value of the resource and failing to take into account the welfare losses to those who do not want African Savannah elephants to become extinct. Economists call this a common open-access resource (i.e. rivalrous and non-excludable) which gives rise to the phenomenon known as "the tragedy of the commons" in which individual self-interest drives resource depletion to the detriment of all.

### *Externalities – loss of wider economic welfare*

20. African elephants can be valued by local communities through the revenue generated from eco-tourism. Recent modelling suggests that the decline in elephant populations has a significant negative effect on tourism visits and revenues (around £25m annually) in the savannah areas of

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<sup>12</sup> Traffic, *A rapid survey of UK ivory markets* (2016), p. 3

<sup>13</sup> Traffic (2016), pp. 2, 29-30. According to the report the role of the UK in the ivory trade is that of a transit country. This means that the UK is not the final destination for most of the ivory going through its ports and airports but an intermediate step in its voyage to the markets in Asia. However, the quantity of ivory taking this route is small when compared to that going directly from Africa to Asia.

<sup>14</sup> For example, see Traffic (2016), p28.

east, southern and west Africa.<sup>15</sup> The modelling considered visitor data and spatial changes in elephant populations. It demonstrates that investments in anti-poaching efforts can offer positive economic returns in terms of increased tourism. In forested areas, the tourism gain is smaller. This highlights that “use values” are only one part of the “total economic value” of conserving elephants.

21. Yet the direct financial incentives for local communities to maintain elephant populations can be weak. This is particularly the case when herds are a direct cost to local communities through damage to agricultural lands and competition for resources.<sup>16</sup> At the same time, the ivory in their tusks generates more financial value after they have died, providing a strong incentive to poachers who generally have limited sources of income. This commercial value consists only of the private value to buyers of ivory products and fails to account for wider use and non-use “externalities”: the economic and cultural values that current and future generations place on the existence of wild elephants.
22. These values are varied and significant. Wild elephants have major artistic and symbolic value for African peoples, and their local ecological role is also often overlooked. They play a critical stabilizing role in their ecosystems: as “landscape architects” that control and create habitats for other wildlife to flourish, thus diversifying local savannah and forest ecosystems; and as “gardeners” or “horticulturalists” that disperse undigested seeds and nuts that enriches the soil and provides fodder for smaller mammals and birds, so maintaining rich plant diversity.<sup>17</sup>
23. UK citizens value the planet’s biodiversity and, in particular, the existence of wild populations of elephants in the “range” countries of Africa. According to an opinion poll carried out by TNS in September 2016, 85% of the UK population support a complete ban on all trade in ivory in the UK and 80% support their government pushing for the closure of ivory markets around the world.<sup>18</sup>
24. Such support is also revealed by widespread membership of conservation charities and organisations concerned with endangered species and elephants in particular, as well as popular engagement with nature television programmes, and visits to zoos, aquariums and wildlife parks.<sup>19</sup> This value, or what in economics is called “welfare” or “utility”, can also be explicitly given a monetary “willingness to pay” value. Whilst we are not aware of any studies estimating UK citizens’ willingness to pay to preserve elephants, research done in Sweden shows that 72% of the households in Sweden were willing to pay an average of 332 Swedish krona in 1996 to save the elephants<sup>20</sup>. This is equivalent to £32 which, allowing for inflation, is equivalent to over £45 per household. This indicative figure demonstrates the value members of an affluent West European country places on these animals. Yet monetary valuations of this kind may not adequately capture the less tangible but deep-seated cultural values held by people for iconic features and species of the natural world, such as ancient woodland or

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<sup>15</sup> Naidoo et al, Estimating the economic losses to tourism in Africa from the illegal killing of elephants, *Nature Communications* (2016)

<sup>16</sup> Taruvinga A and Mushunje (2014). Elephants are also threatened by increasing loss of habitat as a result of rapid human population growth and agricultural expansions. 29% of the existing elephant range is affected by this problem and the projections are that this figure may increase to 63% by 2050 See [www.globio.info](http://www.globio.info) and [https://cites.org/eng/news/pr/some\\_positive\\_signs\\_african\\_elephants\\_continue\\_face\\_serious\\_threats\\_280716](https://cites.org/eng/news/pr/some_positive_signs_african_elephants_continue_face_serious_threats_280716)

<sup>17</sup> <http://www.savetheelephants.org/about-elephants-2-3/importance-of-elephants/> ; <https://www.wwf.org.uk/wildlife/african-elephants>

<sup>18</sup> <https://medium.com/@GreyLondon/politicians-must-heed-overwhelming-public-demand-to-close-all-domestic-and-international-ivory-c4837faae128#.bjj1cez8>

<sup>19</sup> For example, according to the British and Irish Association of Zoos, more than 25 million people visited British and Irish zoo collections each year, that is more than one in three of the British and Irish population. <https://biaza.org.uk/>

<sup>20</sup> Johansson, M.V.: “Valuing a Peripheral Environmental Amenity. The Swedes’ Willingness to Pay for the Survival of the African Elephant” PhD Dissertation. Department of Economics. University of Umea (Sweden), 1997.

elephants, for example in which the species is seen as a signifier of a greater whole, spatially or temporally, in which both humans and wildlife participate.<sup>21</sup>

25. Despite the manifold ways in which individuals express their value for elephants and endangered species through normal market mechanisms and charitable transactions, only government can address the underlying market failures and legal issues.

#### *Asymmetric Information*

26. Although the UK ivory market has not been directly linked to the trade in recently poached ivory, sales of more recent ivory products and particularly raw tusks potentially present a greater risk in terms of opportunity to pass off illegally-sourced ivory as legitimate. The coexistence of legal and illegal ivory in the market creates confusion and some consumers might think they are buying something legal when that is not the case. This is the economic problem of asymmetric information between buyers and sellers potentially creating economically inefficient outcomes. There has been little research into the linkages between the sale of legal, genuine antique ivory artefacts and the illegal ivory trade.<sup>22</sup> Despite existing legal restrictions, the UK ivory goods market is vulnerable to being unable to distinguish between legal and illegal trade, because only goods which have been worked before 1947 can be sold and exported without a permit. The antique trade relies on the seller correctly and honestly assessing the ivory to be pre-1947 and worked. It is disproportionately costly for the trade to use scientific testing such as carbon dating as a means of establishing an item to be worked pre-1947. The cost of testing (£400 or more)<sup>23</sup> is more than the value of many items on sale and requires extracting a sample from the item which can also irreparably damage small or fine items due to the size of the sample needed. Carbon dating is also far less accurate with regard to items created after 1945, due to the atmospheric impacts of the atomic bombs dropped at Hiroshima and Nagasaki.
27. Recent research highlights the fault lines in the domestic ivory trade. For example, in field research by Traffic<sup>24</sup>, casual ivory market traders had limited awareness of legal requirements regarding ivory. Whilst all traders understood that there was a cut-off year for what was considered “antique” (ivory acquired and modified before 1947), some did not know which year this applied to (p.19). The University of Portsmouth interviewed dealers who “stated that they either know of dealers or auctioneers who would sell post-1947 ivory, or that they had witnessed illegal ivory being sold in the UK” (p.53).
28. Furthermore, worked ivory products from the UK can currently be sent to key consumer markets with the relevant CITES permit. These same consumer markets are a frequent destination for freshly poached and illegally-sourced ivory, so any supply of UK worked ivory items, and particularly more recent items, to these markets may become mixed with illegally-sourced ivory, supporting demand which drives poaching and illegal trade. For example trade records from importer and exporter countries and territories can be obtained from the CITES trade database where the UK reported for commercial purposes between 2005 and 2014 the re-export of 17 tusks, compared to 109 tusks from the UK reported by importers.<sup>25</sup>

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<sup>21</sup> For example, Defra’s assessment of the economic, social and cultural value of ash trees [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/200396/pb13906-chalara-socio-economic-framework.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/200396/pb13906-chalara-socio-economic-framework.pdf) (pp. 19-21) and forthcoming research by Defra on the cultural value of pollinator insects. An in-depth assessment of these sorts of shared social values can be found in the UK National Ecosystem Assessment and its Follow-On Study, work packages 5 and 6. <http://uknea.unep-wcmc.org/>

<sup>22</sup> C. Cox (2017) “*The Elephant in the Sale Room: An Inquiry into the UK Antiques Trade’s Sale of Ivory*”, p12, School of Law, University of Portsmouth

<sup>23</sup> Cox (2017), p. 53,

<sup>24</sup> Traffic (2016), p.31.

<sup>25</sup> Traffic (2016), p. 28.

## Policy objectives and intended effects

29. The ultimate policy aim is to end poaching of elephants, but this is not wholly within the UK's power. There are two key intended effects:
  - i. Close domestic demand and supply
  - ii. Reduce global demand and supply with a view to total closure
30. Renewed UK leadership in this area and a commitment to close all legal ivory markets would support this aim by reducing the demand for ivory and thus the incentive to poach. It would also close loopholes in current legislation which present opportunities to launder poached ivory through legal markets, thereby indirectly encouraging continued poaching of elephants. An announcement that the UK will ban all sales of ivory in the UK that contribute directly or indirectly to the poaching of elephants, would send a strong message globally, reasserting the UK's leadership role on conservation issues, and pressuring others to follow suit.
31. As mentioned above, a large majority of the UK population support a complete ban on all trade in ivory in the UK and around the world. The domestic ivory market is already a restricted one. Ending the UK's domestic trade in ivory can be expected further to reduce opportunities and incentives for recently poached ivory to infiltrate the legal ivory trade.
32. By bringing an end to the UK domestic ivory market, the UK will play its part in the global movement to take action on the ivory trade, in line with actions taken by others (see paragraphs 13-14), in turn encouraging other countries to take action, and depriving poachers of their market. Such leadership by example can be very influential on other countries. For example, the UK's Climate Change Act 2008 has influenced other countries to adopt similar carbon budget approaches to climate change mitigation.<sup>26</sup>
33. This proposal will also complement other action that the UK government is taking to tackle the Illegal Wildlife Trade (IWT) and to protect elephants from poaching. At the Hanoi Conference on IWT, which took place in November 2016, the UK announced an additional £13 million to tackle IWT, doubling our current investment. A number of new initiatives were also announced, including:
  - Expanded **British Military anti-poaching training** for African park rangers;
  - A project with **China** to deliver joint training to African border forces; and
  - Additional funding for **Interpol** to expand their work with key nations, tracking and intercepting illegal shipments of ivory and other illegal wildlife products.

## Policy options

34. We have identified two policy options to meet these objectives:
  - **Option 1** – A complete ban, in the UK, on all sales and other commercial trade of worked ivory. This would include domestic sales within the UK, sales to EU countries, and import, export and re-export from or to non-EU countries for primarily commercial purposes

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<sup>26</sup> "It has also been directly influential with other national governments in deciding their own approaches to climate legislation."  
<https://sandbag.org.uk/2017/04/06/uk-climate-change-act-standing-strong-time-change/>

- **Option 2** – As Option 1, but with carefully targeted exemptions in order to mitigate potentially disproportionate business impacts. Exemptions set out in the consultation document relate to allowing the continued sale of:
  - Musical instruments which contain ivory
  - Items which are of significant artistic, cultural and historic value
  - Items which contain a small percentage of ivory, and where the ivory is integral to the item (a “de minimis” exemption)
  - Ivory to and between museums

35. In view of the widespread use of ivory and the potential for disproportionate impacts, Option 2 is the preferred option. The consultation will be used to explore the potential for exemptions that would moderate any disproportionate impacts without undermining the overall aims of the policy of a total ban.

## Other options considered

36. The two options above are the only ones that would meet the policy objectives and intended effects.
37. We previously considered simple date-based restrictions including: on sales of all items of worked ivory produced after 1947. However, there are strong arguments that date-based restrictions are open to abuse, are difficult to enforce, and therefore do not achieve the desired outcome.
38. There are significant policy and enforcement concerns with date-based restrictions on ivory sales given the range of items that contain ivory and as items must be correctly identified as having been worked before the specified date. This would be a difficult process, requiring the assistance of potentially expensive carbon dating technology. As mentioned above, carbon dating techniques have limited application due to the volume of the sample required which on smaller or finer items would destroy and/or devalue the item. It would also impose a greater burden on the Police. Even then, technology would struggle to date such items to a particular year, meaning it is difficult to date items to such a level of accuracy to know for certain that an item was created in a particular year as opposed to the following year.
39. Campaigners against the ivory trade also argue that date-based restrictions on ivory lend some semblance of legitimacy to the overall ivory trade which in turn helps sustain illegal activity. A total ban of UK sales that contribute directly or indirectly to the poaching of elephants, is therefore likely to be more effective in terms of eliminating illegal trade in ivory and the poaching of elephants, compared to date-based restrictions which could simply perpetuate it.
40. Non-legislative approaches have also been considered. This has included stopping issuing permits for post-1947 ivory. We believe, however, that we may need to continue to accept permits from other EU member states for post-1947 ivory, which would create loopholes that could be abused. We have also considered issuing “passports” for larger items as well as the provision of additional information and guidelines to the trade. All of these options would not meet the policy intention and would fail to send an unambiguous message that the UK does not tolerate the trade of ivory. These approaches would also fail to meet the objective for the UK to be at the forefront of global action to protect elephants from poaching.
41. We have engaged with a number of stakeholders who have an interest in government action in this area. This has included conservation charities, as well as representatives from the arts and antiques sectors, and others. In general, and in line with their already known public positions, conservation charities are in favour of a total ban. Other sectors also accept the importance of

acting to protect elephants but have also expressed concern about the potential economic impact of an indiscriminate ban without exemptions. We expect that interested parties will provide further detail on their positions through the consultation process.

## Effects of a “Do nothing” option

42. Under a “do nothing” scenario pre-convention ivory would continue to be traded in the UK. As other countries impose greater restrictions on ivory trade the UK role as a transit country will grow, which may also increase the UK’s unwilling role in the illegal trade, putting wild elephants at continued risk and damaging our reputation as a country committed to conserving biodiversity and wild elephants in particular.
43. Legal ivory trade can increase the illicit trade and poaching because:
  - a) There is confusion whether antiques contain illegal ivory or not. Banning trade will increase the stigma of buying ivory reducing demand in both the legal and illegal markets. Also, those who buy ivory as an investment will cease to do so if they have concerns around whether they can find a market outlet for it.
  - b) There is suggestive evidence that legal ivory is used by smugglers to mask the illicit ivory trade (see paragraph 28). Smugglers use legal permits to launder the product of elephant poaching by increasing the quantity over what was originally certified in permits to trade ivory or by using these permits several times. As the legal market shrinks and permits become more exceptional, laundering illegal ivory becomes more difficult and expensive.
  - c) As the amount of legal ivory diminishes and becomes more easily identifiable monitoring and enforcing becomes easier.
44. Allowing legal trade of ivory items means missing an opportunity to curb the illicit trade and make poaching less profitable. This means elephants will continue to be killed, threatening the future sustainability of elephant populations.
45. The UK has played a leading role in encouraging global change on this issue but currently lags behind other countries in taking action. By doing nothing, the UK risks undermining the effectiveness of other countries’ efforts. As long as buyers believe that there will be places where their ivory can be sold there will be demand for ivory and investment and consumption habits will change more slowly than they otherwise would. Countries including the USA, China and France have already implemented or announced stricter measures to fight the illicit ivory trade – although none is as robust as the approach the UK is proposing. If the UK were to implement a total ban of UK sales that contribute directly or indirectly to the poaching of elephants, this would put the UK at the forefront of ivory measures. Over the last few years the UK has been a global leader in efforts to tackle the illegal wildlife trade, and failing to keep up with the pace of global change on this issue will see our reputation and international working relationships in this area suffer. Moreover, there are concerns that, given our leadership role, some countries who have yet to take action on their domestic ivory markets may use a lack of action in the UK as grounds not to take action themselves.

## Assessing costs and benefits of options

46. The following sections provide a qualitative assessment of the benefits and costs of ending the ivory trade in the UK. These are largely the same for both options. Where Option 2 might have a differential impact, this is explained in the appropriate place. Quantitative evidence on the sectors affected is also presented.

47. This approach is considered proportionate for a Consultation Stage Impact Assessment, especially in view of the data limitations (see below). Since the policy outcomes are largely non-economic in nature, relative analytical effort should be focused on estimation of the potential costs of the policy. This is also likely to be the case for the Final Impact Assessment.

## Benefits of ending the ivory trade in the UK

48. Earlier sections on the rationale for government intervention and on the intended effects of the policy clearly demonstrate the benefits of intervention. In view, however, of the nature of the policy objectives and intended effects, benefits are not monetised. We can identify a range of direct and indirect benefits from ending the UK trade in ivory, all of which ensure the ultimate purpose of protecting wild elephants.

### Direct Benefits

- Benefits to UK citizens whose welfare will be enhanced from the knowledge that the UK is playing its part to bring an end to the illegal trade in ivory that is threatening to bring extinction to African elephants.
- A strong reputational benefit to the UK in showing international leadership, increasing the likelihood that other countries will act to undermine the incentives and opportunities for elephant poaching. The UK has had a leading role in preserving international biodiversity. Contributing to save wild elephants will have a beneficial effect on our international reputation.
- It will be easier to enforce domestically, as enforcement officials will only need to determine whether an object contains ivory, rather than identifying dates and origins.

### Indirect Benefits

- Potential business benefits or new market opportunities for (i) safari businesses and eco-tourism businesses to capitalise on the momentum and increased citizen awareness arising from the ban, and (ii) suppliers of substitute products for ivory and those involved in re-purposing products with non-ivory parts.
  - Preserving the biodiversity and elephant populations have a positive effect on the ecosystems and on other species of fauna and flora, as well as on tourism activity in those areas.<sup>27</sup>
  - Any reduction in the illegal ivory trade will reduce pressure on the destabilising forces involved in poaching, which funds armed conflict, undermines economic stability and the tax-base, and reduces the effectiveness of UK foreign aid.<sup>28</sup>
49. We would expect Option 2 to retain most if not all of the benefits of Option 1, on condition that the exemptions are tightly defined and appropriately targeted. A risk with this option is that exempted activity or products undermine the intended effects of signalling an end to trade in ivory, and would be seen to dilute the strength of the UK's action. We believe this risk can be mitigated if exemptions are strictly limited and targeted.

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<sup>27</sup> Naidoo et al (2016) estimate in \$25 million annually the lost economic benefits that poached elephants would have delivered to African countries via tourism.

<sup>28</sup> Ivory and Insecurity: the Global Implications of Poaching in Africa. Hearing before the Committee on Foreign Relations. United States Senate. 24th May 2012.

## Costs of ending the ivory trade in the UK

50. Ending the domestic trade in ivory will affect businesses engaged in the trading and auctioning of ivory or ivory-containing antiques. Evidence and data in this area is limited and patchy for various reasons. Standard industry data is not granular enough to capture specialist items such as ivory antiques, and understanding value is very challenging in view of the heterogeneous nature both of the industry itself and of antiques and ivory items. There is no single regulatory trade body for the sector, and only a small percentage of UK dealers and auctioneers are members of any trade association. No comprehensive survey exists of the domestic ivory trade, although recent studies by Traffic and the University of Portsmouth have attempted partially to address this.
51. For these reasons the consultation is seeking additional evidence so that a reasonably robust estimate of potential costs might be made. This section considers first the sectors that would be affected by a ban – the arts and antiques sector - and then discusses the best available evidence of the role of ivory in the trade of those sectors. At both stages there are some significant uncertainties. Where Option 2 might have a differential impact, this is explained in the appropriate place.

### Description of sectors affected

52. The ban is expected to result in costs to businesses in three ways:
- For antique dealers that hold stock of items containing worked ivory. These businesses have incurred the cost of inventory in items that could no longer be sold and would no longer be of value. This would be a one-off cost.
  - For antique dealers that could no longer deal in items containing worked ivory, there would be lost profit from those sales (not covered above). This would be an annual on-going cost.
  - For auction houses that sell items containing worked ivory on others' account, there would be lost commission revenue. This would be an annual on-going impact.
53. It is unclear exactly how many businesses there are that would be affected by a ban. One source cites the British Antique Dealers Association as saying there are 20,000 antique dealers in the UK, although this appears to be back in 2002 and is not corroborated by official ONS data (see below). According to the British Art Market Federation (BAMF), the British art and antiques market is comprised altogether of 7,850 businesses, with a turnover in 2013 of £8 billion. Art and antique dealers, as distinct from auction houses, accounted for £4.8 billion of the £8 billion sales, involving 6,850 businesses.<sup>29</sup>
54. This is likely to be a substantial overstatement of businesses affected, given that antiques, rather than art per se, will be more relevant for ivory. The BAMF report distinguishes between “Fine art” and “Decorative arts and antiques”, with 62% of sales (and 80% of exports) accounted for by fine art. This would include largely paintings and commercial galleries but there may be still an aspect of this sector being affected by a ban (e.g. ivory containing portrait miniatures could be defined as fine art). Such items in which only a fraction of the content or value was accounted for by ivory could be covered by the proposed ‘de minimis’ exemption.

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<sup>29</sup> *The British Art Market in 2014*, <http://tbamf.org.uk/wp-content/uploads/2014/08/British-Art-Market-2014.pdf> p. 19



55. A more relevant starting point for assessment is the antiques sector specifically. Aggregate data is available from the ONS' Annual Business Survey (ABS), some of which is reported by The European Fine Art Foundation's *Art Market Report 2017*.<sup>30</sup>
- The UK retail antiques sector (including antique books but excluding stall sales) generated turnover of £730 million in 2015 and a Gross Value Added of £308 million. This sector contains around 1600 antique dealers in the UK, generating employment of around 5000 (2000 of which are part-time).<sup>31</sup>
  - A portion of retail trade from street stalls will also be accounted for by antiques. Retail turnover of stalls and markets of goods other than food and textiles in 2014 was £84 million, generating a GVA of £28 million.<sup>32</sup>
  - The ABS also reports on "Commercial art galleries", a sector in which 1387 enterprises generated turnover of £2.8 billion and GVA of £927 million in 2015.<sup>33</sup> However, we would not expect this sector to be affected by an ivory ban. **We would welcome views and evidence on this from the consultation.**
56. Separately and additionally, the auction sector (as distinct from antique dealers who buy and sell) is estimated to contain 1000 businesses and generate a turnover of £3.2bn according to the BAMF. The sector, however, is dominated by two multinational auction houses holding a market share of 53% with the remainder averaging 10 employees.<sup>34</sup>
57. As this evidence suggests, the trade is very diverse, ranging from multinational auction houses employing many specialists to online traders, shop keepers, stall-holders, small auction houses, right down to micro house clearance companies selling at weekend car boot sales. Survey evidence for the British Art Market Federation suggests that art and antique dealers employed an average of seven staff with a median of four employees. The majority were also categorised as small companies in terms of the size of their turnover (less than £8.5 million per annum) with just 10% of those surveyed being medium or large companies.<sup>35</sup> Similarly, a survey in 2012 of members of the British Antique Dealers' Association showed that 75% of members employed four or fewer staff.<sup>36</sup>

### Importance of ivory in the art and antiques sector

58. The share of ivory in the value of the antiques trade will be relatively small, given the wide diversity of antique items on sale that will not contain ivory, and where ivory is part of an item, it may only be a small, but potentially valuable part. Some businesses will be more dependent upon ivory sales than others, for example auction houses specialising in musical instruments. The overall picture appears quite mixed and therefore unclear.
- According to the British Antique Dealers Association, historically ivory has been incorporated into a wide range of cultural artefacts, often as incidental or ornamental components of the object. Carved ivory objects date back as far as ancient Greece and Rome. In the eighteenth and nineteenth centuries, ivory was a common medium for portrait

<sup>30</sup> <http://1uyxqn3lzdsa2ytyzj1asxmmmpt.wpengine.netdna-cdn.com/wp-content/uploads/2017/03/TEFAF-Art-Market-Report-20173.pdf> Country section on the UK.

<sup>31</sup> Annual Business Survey, Class 47.79/1

<sup>32</sup> Annual Business Survey, Class 47.89

<sup>33</sup> Annual Business Survey, Class 47.78/1

<sup>34</sup> *The British Art Market in 2014*, <http://tbamf.org.uk/wp-content/uploads/2014/08/British-Art-Market-2014.pdf> p. 19

<sup>35</sup> *The British Art Market in 2014*, p. 19 <http://tbamf.org.uk/portfolio/the-eu-directive-on-arr-and-the-british-art-market-2/>

<sup>36</sup> British Antique Dealers' Association, *Annual Survey of members 2012* [http://www.bada.org/public/BADA\\_Annual\\_Survey\\_2012.pdf](http://www.bada.org/public/BADA_Annual_Survey_2012.pdf)

miniatures, and could be incorporated as decorative inlays and fittings in wooden furniture and musical instruments (as well as used for piano keys). Other antique objects making use of ivory include walking canes, cutlery and theatre tokens. Carved ivory antiques are more typical of the middle ages (as devotional religious objects) and from African and Japanese traditions.<sup>37</sup>

- Many antique and auction businesses may not deal in ivory items at all; according to a report in 2012, only 9% of BADA (British Antique Dealers Association) members applied for a CITES licence.
- According to internal research by the BAMF back in 2015, the three largest salerooms in London sold a total of 3081 lots in 2014 which in description were made from, or contained, ivory. These included Chinese works of art, European furniture, musical instruments and tableware. Sales of such antiques from two of the three auction houses totalled just over £6m. Elsewhere in England, a sample of eight local auction houses sold 3,770 ivory related lots valued at £1.1m. Such sales accounted for between 1% and 6% of annual turnover of such auction houses. These are likely to be underestimates to the extent that lot descriptions do not pick up small ivory components of more artefacts (e.g. furniture fittings).<sup>38</sup>
- Of the 59 respondents to an independent survey in 2016 of auctioneers and dealers, almost half said that ivory accounted for less than 10% of their sales turnover, similar magnitude to the BAMF finding above.<sup>39</sup> 18% said that ivory accounted for over 50% of their turnover. When asked how a total ban (without exemptions) on the sale of all ivory and ivory goods would affect their businesses, four of the 41 respondents said it would force them to close down while 23 (or over half) said it would have a significant effect. When cross-referenced to the size of the business it would seem that those with relatively large turnovers (£1m+) are the ones saying they would be particularly affected by a total ban. Smaller businesses appear less dependent upon ivory sales. Whilst informative, this survey's low response rate and a likely degree of self-selection to those with a stake in ivory antiques, suggests it is not representative and is an overstatement of the actual picture, even under Option 1. Under Option 2, it would be the case that some of these potential losses to business would not materialise, insofar as those businesses were dealing in ivory items that fall within exemption categories.
- Similar evidence, but slightly more pessimistic, is the claim by BADA in 2015 that 231 (70%) of its members would be affected by a total ban (without exemptions) on the sale of ivory, of which 51 (equivalent to 16% of respondents) would be severely affected.<sup>40</sup> Again, it is not clear how representative such proportions are of non-respondents and in particular of the 1600 businesses recorded in the Annual Business Survey.
- Recent field research by Traffic in London found that 15% of antique stalls and shops surveyed offered ivory items for sale, with an average of 16 items per stall. Assuming that stalls selling ivory sell many other types of antiques, this suggests that that ivory's share in overall antiques in the London trade will be far less than 15%.<sup>41</sup>

59. Professional musicians would potentially be affected by a total ban on ivory sales under Option 1. Many musical instruments made before the twentieth century contain ivory components, such

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<sup>37</sup> BADA, *Ivory and its widespread use in cultural artefacts* (2014) <http://fixesa.org/wp-content/uploads/2014/03/Ivory-and-its-widespread-use-in-cultural-artifacts-US.pdf>

<sup>38</sup> British Art Market Federation (BAMF) communications to Defra, August and October 2015.

<sup>39</sup> Cox (2017), p. 33

<sup>40</sup> BAMF communication to Defra, August 2015.

<sup>41</sup> Traffic (2016) shows a reduction of stalls selling ivory items from 641 to less than 200, p. 14.

as piano keys, violin bows, and trims on bassoons and other woodwind instruments. Others, such as bagpipes and early recorders, can be made largely or entirely of ivory. Many such instruments will be valuable and in continuous use by professional musicians and orchestras. Some owners may opt to repurpose their instruments to remove the ivory content, although this could significantly affect the value of an antique instrument. Over the past few years, musical instruments have represented around 6% of applications for permits to export items containing ivory.<sup>42</sup>

60. Depending on the nature of the exemptions under Option 2, there may be the need for businesses to familiarise themselves with the new arrangements. Under Option 1, as there will be a total ban it would be expected that such familiarisation costs would be minimal or negligible.
61. Although a total ban on ivory sales will affect businesses to varying degrees we would expect there will be some capacity for firms to adapt over time to mitigate any losses, for example diversifying into other lines.
62. We do not expect any adverse effects on innovation.

### **Costs to individuals**

63. There will also be a cost to private individuals and households which have their own items made of or containing ivory. According to the British Antique Dealers Association (cited in the Portsmouth study), there are over two million items made of ivory or with an ivory component (such as piano keys, furniture fittings, carvings, boxes and knife handles) in British homes. Ivory objects are frequently and widely valued for probate or insurance purposes. The value to their owners will largely be for their own use, pleasure or sentiment, but they are also assets with a resale or inheritance value. Ending the domestic trade in ivory containing products would eliminate the legal financial value of such assets and represent an overall loss of wealth to British households. Some of this might be mitigated where items could be repurposed to remove the ivory in order to retain some legal financial value. Estimating such losses would be very hazardous in view of major uncertainties relating to the resale value of such items, the potential for re-purposing, date of potential future resale and the alternative value to owners of retaining the items. Under Option 2, it would be the case that some of these potential losses would not materialise, insofar as those households owned ivory items that fall within exemption categories.
64. Where private owners or inheritors of ivory objects can no longer realise a financial market value, those individuals would have an incentive to dispose of or donate such items, particularly if rare (e.g. to local churches or museums), which could bring a benefit in terms of increased public access.

### **Costs of enforcing compliance**

65. Because an enforcement model has not been designed, this impact assessment is unable to assess the likely additional burden for enforcement bodies or for the industry. This will be a key priority for policy and evidence during and after the consultation. The enforcement model will depend in part on the scope of the ban, as outlined below.
66. When compared to the baseline option the costs incurred by the UK Management Authority for enforcing Options 1 and 2 will vary. Under the baseline option the police, including the National Wildlife Crime Unit, are responsible for enforcing CITES controls on the sale of ivory in the UK. In this, they work with the Animal and Plant Health Agency's CITES compliance team. Border Force is responsible for enforcing rules on the import and re-export of ivory at the border.

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<sup>42</sup> APHA data

- For Option 1:

We expect that there will be increased enforcement costs related to this approach because greater restrictions on sales will apply which may increase the resources required by the police and justice system, however these may be off-set in part by a decrease in cost associated with permitting. We are seeking views on how the ban should be enforced through the consultation.

- For Option 2 :

We expect that any increase in costs will be higher under Option 2 than Option 1, as enforcement bodies such as the police will be required to identify whether an item contains ivory and whether that ivory is exempt from the total ban. We expect that any savings as a result of decreased permitting will also be less if some items can still be imported, exported and re-exported as currently allowed.

67. It is not expected there will be any familiarisation costs incurred by the industry for Option 1. The familiarisation costs under Option 2 will depend on the level and nature of exemptions.

### **The costs of exemptions under Option 2**

68. Under Option 2 the scope and functioning of exemptions will be considered through the consultation process. Four types of exemptions are identified in the Consultation Document, which would enable the continued sale of:

- Musical instruments which contain ivory. Other countries that have restricted their markets have exempted the sale of musical instruments from these restrictions.
- Items which contain a small percentage of ivory, and where the ivory is integral to the item (a “de minimis” exemption). This recognises that in some items the ivory content is incidental to the attraction and value of the item. For such items the ivory content is also likely to be integral, meaning it could not be removed and refashioned. The scope and threshold levels of the exemption are being explored through the consultation.
- Items which are of significant artistic, cultural and historic value. This recognises that some items which contain, or are made of ivory, are significant for other reasons, namely their value lies in their artistry, cultural significance or historic provenance, as opposed to their ivory content. Any exemption of this kind would need to be strictly defined to ensure that only the rarest and most important items are exempted.
- Ivory between, or to, museums. There may be some cases where museums may want to sell or exchange items containing ivory to/with other museums. This also recognises that there may be some items owned by private individuals that are of such importance they may be valuable to museums.

69. Depending on which items are made exempt, the costs to businesses and individuals, relative to Option 1, would be reduced accordingly by:

- i. Maintaining the market value of those items currently held by businesses and individuals; and
- ii. Allowing the continued trade in exempted items

70. Exemptions will necessarily involve some costs. These would depend upon the precise nature of the exemptions, but might include the costs to businesses in demonstrating that their items would qualify for an exemption. But it would be in the applicant’s interest to qualify for the

exemption. This cost would be additional to the baseline option. All categories of exemption would need to be strictly defined and enforced to prevent exploitation.

## Small and Micro Business Assessment (SaMBA)

71. A small business is defined as one employing fewer than 50 full-time equivalent employees, and a micro-business as one employing up to 10 employees. As indicated above, surveys suggest the vast majority of the affected sector consists of micro businesses, with a median of four employees. Auction businesses are slightly larger on average than antique businesses. At this stage it is not possible to quantify impacts on small businesses. However, in this section we make an initial assessment as set out in SaMBA guidance questions.

*How much of the overall cost to business is expected to fall on small businesses?*

72. In view of the structure of the antiques and auction industry, we would expect the majority of businesses affected to be small and micro businesses. However, we would not consider this disproportionate inasmuch as the costs in terms of lost stock value and lost trading margins is expected to be proportional to the size of the business i.e. the costs are variable not fixed. So for example, if ivory typically accounts for 5% of antique sales, that percentage will imply a larger absolute loss for a larger firm than for a smaller firm.

73. Under Option 2 the principle of targeted exemptions, to the extent that these are not based on criteria related to business size, should not disproportionately disadvantage smaller firms.

74. The fixed costs to businesses of familiarisation with new procedures are likely to be minimal with Option 1, a total ban, while with Option 2 this is dependent upon which exemptions are taken forward.

75. A key factor in assessing overall cost burdens is the proportion of sales accounted for by ivory products, and in particular whether specialists in this trade are more or less likely to be smaller businesses. Evidence from the Traffic report that 15% of antique stalls and shops surveyed in London offered ivory items for sale, with an average of 16 items per stall, suggests that only a proportion of the stock value of a minority of sole traders will be lost.

*How much of the policy objective would be sacrificed by applying a full exemption to small businesses?*

76. It is clear that a full exemption to small businesses from a ban on ivory sales, given their level of presence in the trade, would render unachievable the policy objectives to close domestic markets in antique ivory and ivory products. It would not send the strongest signal possible to other countries. It would imply only a marginal reduction in ivory trade sales. Trade in ivory products currently through larger businesses could be displaced and diverted through smaller businesses. Large businesses would also have an incentive to create new smaller specialist trading arms in order to trade ivory products. In principle, a full exemption for small businesses would significantly reduce the benefits in quantitative terms of the policy.

## Assumptions and limitations of the analysis

77. Assessing the costs and benefits of a total ban on ivory sales is subject to a range of limitations and assumptions that has mean quantification is not possible at this stage.

78. On the benefits side, the key assumptions are that (i) other countries will be positively influenced by the UK lead and implement their own bans, and (ii) there will be, exemptions aside, the closure of the UK domestic market which will result in a reduction in overall global demand of ivory. Reduced demand puts downward pressure on prices and reduces the incentive to poach and kill elephants.

79. On the costs side, there are uncertainties regarding the impact of the option on parts of the UK arts and antiques markets and on professional musicians. In order to assess impacts robustly, information will be required on, for example, numbers and size of firms affected, share of ivory in trade, breakdown of sales by age, item, and weight etc. stocks of ivory held by firms and individuals. We also lack information about the scope for the sector to adapt to a loss of part of its market. We hope to acquire this information through responses to the consultation.

## Wider impacts

80. We have considered the possible wider impacts of this proposal and have discussed the relevant ones in the cost and benefits section.

## Summary of key evidence gaps

81. In order to make a robust assessment of the effects of the leading options, a number of key evidence gaps would need to be filled. These are summarised in the table below. **We welcome responses from those consulted on all of these points.**

Evidence gap	Addressing the gap
Details on the structure, size and turnover of the antiques market	Consultation responses to identify any further reports, data and wider evidence.
Value of existing ivory stocks held by the sector	
Data on the share of ivory in the antiques market	
Evidence on the values and volumes of potentially exempt categories of products	
Numbers of specialist ivory dealers, including small businesses	
Enforcement costs of a ban or a ban with exemptions	Pending design of an enforcement model, which will be informed by the consultation. Consultation also with enforcement agencies.
Estimates of the value of ivory products owned by UK households	Data limitations expected. Unlikely to be robust, and in any case is not the actual cost
The costs to business of accessing exemptions	This will depend upon the scope of exemptions taken forward.

## Conclusion

82. This Impact Assessment has set out the political and economic case for banning the sale of ivory in the UK. It has identified the nature of the benefits and costs and the sectors and groups affected, and the challenges and uncertainties in estimating impacts. The Consultation will provide an opportunity to gather more evidence on these points, and Defra will continue to

review relevant studies and evidence with the intention to produce specific estimates of impact in a revised Impact Assessment.