Title: Equine Identification (England) Regulations **IA No:** Defra1785 **RPC Reference No:** **Lead department or agency:** Defra **Other departments or agencies:**	**Impact Assessment (IA)** **Date:** 09/09/16 **Stage:** Consultation **Source of intervention:** EU **Type of measure:** Secondary legislation **Contact for enquiries:** Tim Matthews, Area 5 A, Nobel House, 0208 026 4205

Summary: Intervention and Options

RPC Opinion: RPC Opinion Status

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**
£-5.1m	£-0.9m	£0.1m	In scope	Qualifying provision

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

It is an EU requirement for all horses and related animals ("equidae") to be individually identified with a passport and, in most cases, a microchip . This is to ensure the safety of horse meat for human consumption by providing a reliable record of the horse's veterinary treatment. EU investigations in 2013 showed that some horse meat contained substances not suitable for human consumption, and replacement EU Regulation 2015/262 has been introduced to address weaknesses in the current regime . Government intervention to implement the new regulation is needed to address market failures, human health externalities and asymmetric information between sellers and buyers of slaughter horses.

What are the policy objectives and the intended effects?

The intended effect of the policy is to ensure that horse meat produced in the UK is safe for human consumption, and thereby to protect the UK horsemeat industry by retaining consumer confidence across the EU. The EU legislation introduces a number of directly applicable changes aimed at delivering this, including a national database of equine ID information and improving standards for passports and passport issuers. There are also some options available to enhance the legislation for better effect. This includes, for example, the option to require all horses to be microchipped, with a unique microchip number. This is a reliable method of identifying individual equines.

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

Four approaches have been considered: (i) Alternatives to regulation; (ii) Option 0: Do nothing - do not implement the Commission Regulation; (iii) Option 1: (preferred): Do the EU minimum with some enhancements- implement the Commission Regulation with a small number of enhancements to ensure protection of public health and a efficient and effective regime; (iv) Option 2: Do the EU minimum - implement the Commission Regulation.

Option 1 : These enhancements are mandatory micro chipping of an estimated 152,000 non-racing horses born before 2009; mandatory replacement of failed microchips; reduced 24 hour timescale for passport issuing organisations ("PIOs") to update the UK equine database ("central equine database" or "CED"); allowing owners to notify changes to equine identification details to CED before notifying the PIO; and using CED to conduct certain updates to member states on behalf of PIOs.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 06/2022

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_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:** N/A	**Non-traded:** N/A	

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: Implement EU requirements with some enhancements (gold plating)

FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2017	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:** 5.1

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	5.1			**5.1**

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

The (one-off) costs for parties to familiarise themselves with the new regulations amount in total to about £0.3m (at constant prices) of which about half falls to business. The total (one-off) cost of microchipping horses born before 2009 when compulsory microchipping was introduced, amounts to £4.9m (at constant prices) of which about £0.7m falls to business (see annex 2). The shorter deadline for updating the Central Equine Database will cost businesses an additional £7k per annum,.

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

One-off cost to horse owners of replacing failed microchips (very rare occurrence and negligible cost); Passport issuing organisations will have less flexibility in the time allowed to update the Central Equine Database; Small one-off cost to Government to enhance database function to allow owners to notify changes to equine details faster.

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

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

Benefits have not been measured, (see Annex 1 for details of the potential benefits of this option).

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

Mandatory micro-chipping and improved database information make it easier to identify horses, resulting in: (i) Clearer and more easily accessible food safety information, improving food safety and reducing costs to slaughter businesses; (ii) Easier identification of horses and their owners by enforcement authorities, in cases where food safety, welfare or property legislation has been breached. (iii) Additional protection from horse owners against fraud and loss.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

This analysis assumes full compliance with the regime by horse owners, passport issuing organisations and other users.

Adequate data is not available to monetise some of the effects of these changes. However, the expectation is that in such cases their monetised impact will be very small.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 0.1	**Benefits:** 0	**Net:** 0.1	0.5

Evidence Base (for summary sheets)

Policy issue

The equine industry generates an estimated revenue of £3.8 billion in the UK[1] (Equine Sector 2015 General Election Manifesto for the Horse). One element of this industry is the production of equine meat for human consumption.3653 equines where slaughtered for this purpose in England in 2015/16, (FSA Slaughter Statistics). and 294,380 horses were slaughtered for human consumption in Europe in 2012 The industry is largely rural. Equine meat is mainly exported as it is more commonly consumed in other parts of Europe rather than in the United Kingdom. The industry also provides a cheap and humane disposal route for equines that may otherwise be neglected or abandoned because the owner can no longer afford to keep the animal. Consumer confidence in the safety of UK equine meat is essential to maintain demand for horse meat that underpins these benefits.

- To ensure that meat entering the food chain is safe, the EU established a system to identify equine animals individually. This means that a record should be available for each animal which states whether it has been given veterinary medicines that are not suitable for use in the food chain. The key elements of the existing regime, as implemented in England, are:

    - Each equine must be identified with a passport that must accompany it at all times. The passport contains vet-certified information about the identity of the animal (including distinguishing marks on “outline diagrams”) and whether it is suitable for entry into the food chain.

    - Equines identified after 2009 must also be micro-chipped. This provides a clear and simple method for linking animals to their passports.

    - In England, passports are issued by Government approved Passport Issuing Organisations. There are currently 51 approved PIOs in England which are mainly rural microbusinesses.

    - The system is currently enforced by Local Authorities and the Food Standards Agency (FSA). Local Authorities are responsible for dealing with people who fail to identify a horse and to update its records correctly. The FSA checks that all horses presented for slaughter at abattoirs are eligible to enter the food chain.

In 2013 investigations in several EU Member States revealed that horse passports were the target of fraud. Although horse passports would not prevent the mislabelling of horse meat, the investigations uncovered weaknesses in the EU equine identification system. This included inconsistencies in standards and practices followed by Passport Issuing Organisations, and poor understanding of current regulations across the equine sector. The absence of a central database of horses recorded in the UK presents a risk of multiple passports being issued for a horse, makes it difficult to verify that a passport is genuine or to verify that a horse is eligible to be slaughtered for human consumption. A culmination of these factors presented a food safety risk. Evidence from veterinary residue testing undertaken by the Veterinary Medicines Directorate and Food Standards Agency showed that horses which had been treated with phenylbutazone (bute) were being presented for slaughter for human consumption in UK abattoirs. A horse which has been treated with bute is not permitted to enter the human food chain because it has not been approved for use in food producing animals.

[1] This legislation applies to England only. Some of the statistical material available applies to the United Kingdom as a whole but originate from the most reliable sources of information available

To address the weakness in the system and improve protection of the human food chain, the European Commission replaced the existing regulation EC504/2008 with new regulation 2015/262. The main changes to the existing regime are:

- Introduction of a mandatory Government-funded UK equine database ("central equine database" or "CED"). This will bring together information from all 67 UK PIOs in one place and make fraud easier to identify both nationally and across the EU.

- Improving security standards for passports. New security features, such as rivet binding, will make passports harder to amend or copy.

- Clearer operating standards for issuing organisations. This includes greater powers to remove approval to issue passports if the rules are broken.

- New requirement to notify PIOs when a horse is signed out of the food chain. Fraudulently presenting an unsuitable horse for slaughter will be harder when accurate records are kept centrally.

We will need to replace the existing national Horse Passport Regulations (England) 2009 to enforce the rules and take advantage of different options that are available.

Rationale for Government intervention

Government intervention is necessary to address market failures which could negatively affect the safety of equine meat and the UK equine meat industry. These are human health externalities (certain medicines administered to horses may have deleterious impacts on people if ingested via the consumption of horsemeat) and asymmetric information between sellers and buyers of slaughter horses (sellers typically know the medical history of horses being sold but buyers do not).

The reason for banning some horses from entering the human food chain is to protect human health from the harmful effects of certain horse medications. A robust system is needed to identify and record medication history of all horses in an identification document (or horse passport) and a central database. This system is a valuable tool in reducing the risk of such horses entering the human food chain. It also facilitates the formation of a viable market in cull horses which are not banned from entering the human food system.

Policy objectives and intended effects

The objectives of the policy are to ensure that equine meat is safe to eat, and thereby engender consumer confidence and maintain a viable UK equine meat industry.

The primary intended effects are:

- Ensure that delivery partners and stakeholders understand and meet their statutory roles and responsibilities.
- Strengthen the end to end effectiveness of the equine identification regime.
- Make up to date information easily available to enforcers via a central database.
- Implement an offences regime that is easier for local authorities and the FSA to enforce.
- A more effective equine identification regime would also benefit equine welfare by maintaining a humane disposal route and making it easier to identify and prosecute the owners of neglected equines.

Application and scope

Equine identification is a devolved matter. The proposed implementation approaches are for England only.

Policy options considered

Option 0 – Do nothing (ruled out)

Under this option we would not implement the EU regulation. This would create a significant risk to food safety and horse meat trade. Additionally, it would likely lead to legal proceedings and potentially fines ("infraction") from the EU. This option has therefore been ruled out, but will be used as a baseline for analysis of other available options.

Option 1 – do the EU minimum with some enhancements (preferred)

In a small number of cases options that incur a small additional cost to business may be taken. This is because they are necessary to ensure the regime is safe, effective and practical and adequately protects public health. These options are gold plating but Defra considers they are justified, and they are also broadly supported by the sector itself, evidenced through Defra's engagement across the equine sector through attending meetings, sending out policy updates and inviting views. From written and verbal feedback, we know that the Equine Sector Council and enforcement bodies support these measures but some Passport Issuing Organisations have raised some concerns. Details are set out in table 1. All gold plating that incurs an overall cost to business will be consulted on.

Option 2 - Do the EU minimum (ruled out)

This option would involve creating the national legislation necessary to enforce the new Commission Regulation 2015/262. Where the Regulation provides options about how it is implemented then the lowest cost to business option will be chosen. The measures under this option are set out in annex 1.

Alternatives to regulation

This is ruled out as a comprehensive approach, but where possible, we will work with the sector to strengthen the regime using alternatives to regulation. We will take measures to encourage good practice, for example owners are to be given limited access to the Central Equine Database and the sector has agreed to promote the benefits of this feature to horse owners so that they are motivated to identify their horses.

Defra has engaged with the Equine Sector Council to try and identify further options for changing stakeholder behaviours through persuasive argument and information campaigns as a non-regulatory option to the gold-plating options. The Equine Sector Council advice is that non regulatory approaches are likely to deliver only limited improvement and have asked Government to introduce additional regulation on this.

Table 1: Enhancements being considered under option 1, including gold plating.

Proposed additional measure	Further details	Article (EU Regulation 2015/262)	Justification
Micro-chipping			
Mandatory micro chipping of older horses	Gold-plating - additional requirement permitted by EU legislation which may incur some additional cost	Article 18 (5) (C)	Horses identified before 2009 did not previously need to be micro-chipped. It is estimated that there are around 152,000 of these horses still alive (see Annex 2). As a result it is often hard to identify these horses in the field, causing difficulty with enforcement of identification, welfare and food safety legislation. Mandatory micro-chipping of older horses could help to overcome this. Many parts of the equine sector support mandatory micro-chipping of older horses as a means to ensure robust equine identification. However, views are polarised and there is a significant, vocal minority who oppose this change. Horse owners may incur additional costs.
Mandatory replacement of failed microchips	Gold-plating - additional requirement permitted by EU legislation which may incur some additional cost	Article 18 (5) (A)	Micro-chip failure is thought to be extremely rare. However, if a horse's microchip were to fail this would create difficulties in ascertaining its identity. Outline diagrams are not always mandatory for horses that where originally micro-chipped, so the replacement of failed microchips is essential to link these horses to their passports and therefore their food safety records.

			Horse owners may incur additional costs.
Central Equine Database (CED)			
PIOs to update CED with changes to horse details within 24 hours.	Gold-plating - goes beyond minimum EU requirement	Article 38 (3)	New EU legislation requires PIOs to notify the central database of changes to a horse's details within 15 days. It is essential that the database contains up to date information on a horse's status so that the regime can be managed and enforced effectively by PIOs and enforcement authorities. Most parts of the sector agree that a tighter updating timeframe for PIOs is required. PIOs may incur additional costs.
Basic horse details available to the public	Non-regulatory - additional to EU requirement	N/A	EU legislation requires certain horse details held on CED to be made available to other Member States. The same system could be used by the public at negligible additional cost to Government to allow them to also search the database for limited non-personal information. Public access to data would enable owners to ensure that their records are correct, and would also be of use to businesses such as abattoirs to inform commercial decisions. Small cost to Government only.
Option for owners to notify PIOs of changes to equine identification details via CED before sending in their passport.	Non-regulatory - use is optional	Articles 27 (3) and 37 (4)	Owners are responsible for reporting changes to their horse's details, including ownership information, to PIOs. Anecdotally equine stakeholders state that levels of reporting are currently low, which creates difficulties for enforcement authorities and PIOs as the data they hold is out of date. Stakeholders, including the Equine Sector Council, believe that giving owners access to an optional online mechanism to notify PIOs of necessary changes to their records is vital to increasing reporting and therefore improving the efficacy of the regime. We have confirmed with Government Digital Service that this extra functionality would be simple to develop and does not require additional complexity such as GOV.UK Verify. Our assessment is therefore that the necessary functionality would provide significant benefits, and could be provided at low cost to

			Government
Option for CED to notify changes in equine identification details to other member states on behalf of PIOs.	Non-regulatory - use is optional	Articles 38 and 40	EU legislation requires CED to notify other Member State's databases of changes to horse's details in certain situations. It also requires PIOs to do the same thing themselves in other situations. The functionality that will have to be put in place to perform the notifications from CED could also be used at very low cost to Government to conduct the other, similar notifications on behalf of PIOs, making updates easier for PIO users and simplifying the overall process

Approach to and justification for level of analysis

Focus of analysis

No costs and benefits are measured for option 0 but it does represent the baseline against which the preferred option is compared and quantified.

The new EU Regulation applies directly to member states. However, we will need to replace the existing national Horse Passport Regulations (England) 2009 to enforce the rules and set out our approach to different options the EU offers.

Under policy Option 2 we would take the lowest cost to business option available in all cases. This constitutes the minimum EU requirement and is directly applicable. We have decided not to quantify the costs and benefits of this option as permitted under paragraph 2.4.28 of the Better Regulation Framework Manual. A description of all the measures to be applied under the EU legislation (including justification of their classification as "lowest cost to business") is available in annex 1 for information.

Similarly under option 1 we have not measured the costs and benefits of directly applicable measures that do not go beyond the EU minimum (see measures described in annex 1). The analysis in the Impact Assessment therefore focusses on policy Option 1 and the cost, particularly to business, of measures where we recommend gold plating.

Enforcement and powers of entry

Compliant individuals or businesses will not be affected by changes to the enforcement regime so this has been excluded from further analysis.

Availability of data

Data to inform this impact assessment has been sought from Government, delivery partners and the equine sector. Passport Issuing Organisations, veterinary surgeons and others have been contacted to provide typical business costs, The Food Standards Authority were contacted about the availability of equine slaughter statistics and World Horse Welfare reports and statistics from the British Equine Federation were used where possible. However, the availability of complete and accurate data about the equine identification regime specifically is extremely limited. This even includes, for example, basic data about the number of horses and horse owners in England. This assessment utilises available data highlighting its limitations.

In most cases it would not be possible to collect accurate data without conducting new and costly surveys. This has been ruled out on proportionality grounds.

Option 1 – costs and benefits

This section contains a cost-benefit analysis of gold plating suggested under option 1.

Micro-chipping of older horses

Horses identified before 2009 did not previously need to be micro-chipped. As a result it is often hard to identify these horses in the field, causing difficulty with enforcement of identification, welfare and food safety legislation. Mandatory micro-chipping of older horses would overcome this. The Equine Sector Council and enforcers support mandatory micro-chipping of older horses as a means to ensure robust equine identification. However, views within the industry are polarised with Passport Issuing Organisations raising concerns about the practicalities of the change. Some PIOs and owners also question the value of introducing this when Local Authorities have varying capacity for robust enforcement. The majority of the costs associated with the measure would fall on private individuals rather than businesses, as most horses are owner by private individuals. This being the case it is likely that changes introduced in the Regulations would need to be phased in over an extended period to give owners the chance to adjust their current practices.

Table 2 Microchipping of older horses

Who is affected?	Costs	Benefits
Responsibility for microchipping older horse will fall to their owners (some of whom are businesses[2]). A certain amount of new business will be generated for vets and PIOs (undertaking the microchipping and recording the details on passports). Those who need to verify the identity of a horse will find it easier.	The total one-off cost for microchipping horses born before 2009 is estimated to be £4.851m (at constant 2015 prices). This covers the veterinary charge, the PIO charge etc. (see annex 2) Of this total £4.161m falls to private owners and £0.69m falls to business owners. (See Annex 2 for details of these estimates)	The principal benefit will be quicker, easier and more reliable identification of older horses in the field and at the abattoir. This will reduce fraud and ultimately improve food safety and confidence in the market. It has not been possible to monetise these benefits as the relevant data is not available and it would be disproportionately costly to collect it.

Replacement of failed microchips

Micro-chip failure is thought to be extremely rare. However, if a horse's microchip were to fail this would create difficulties in ascertaining its identity. Outline diagrams, (a silhouette drawing of the horse on the passport where the markings have been annotated by the owner/keeper and verified by a qualified veterinary surgeon). are not always mandatory for horses that were originally micro-chipped, so the replacement of failed microchips is essential to link these horses to their passports and therefore their food safety records.

[2] Enquiries have been made of equine trade associations (British Equine Trade Association and British Horse Society), but no definitive figures on proportions of horse owning businesses in England have been available.

Table 3 Replacement of Failed Microchips

Who is affected	Costs	Benefits
Responsibility will fall on horse owners, some of whom are businesses.	Whilst there are no definitive figures, anecdotal evidence suggests that the failure rate for microchips is widely recognised to be extremely low. Under any reasonable assumptions the total cost of replacing failed microchips is likely to be very low[3].	The benefits will be similar to the initial microchipping of a horse – see table 2 above. As above we are unable to monetise this benefit.

Time allowed for PIOs to update central equine database

New EU legislation requires PIOs to notify the central database of changes to a horse's details within 15 days of the change and within 24 hours of a passport being issued or updated. It is essential that the central database contains information that is as accurate and up to date as possible for the status of all horses identified or kept on holdings in the UK so that the equine identification regime can be managed and enforced effectively by PIOs and enforcement authorities. We propose that PIOs notify the central database within 24 hours (excluding non-working days) for the following reasons.

Food Standards Agency staff at abattoirs use the database to verify that the identification and food chain information on horse passports matches the central database and that horses presented for slaughter are safe for human consumption. If it does not match the horse must be excluded from the food chain. (Notably, before issuing a passport PIOs are required to check that a passport has not already been issued for that horse. If it has, the PIO is allowed to issue another passport but must record on the passport and database that the animal must not enter the food chain.) Also, when Local Authority officers find a horse that has been abandoned, lost or straying they will scan its microchip and use it to find the address of the owner on the database.

These controls rely on information being as up to date as possible. Most parts of the sector – including the Equine Sector Council Steering Committee, the National Panel for Animal Health and Welfare Officers and the FSA – have argued for real time information exchange between PIOs and the central database. This is not possible but as a balance we have proposed that PIOs notify changes to the central database within the permissible 24 hours after they have updated their own database. This should be achievable at negligible additional cost to PIOs (see table below). Some rare breed PIOs dealing with low horse volumes are not staffed full time by specific agreement with Defra but it should not be onerous for them to transfer changes electronically to the database within 24 hours of updating their database.

Table 4 Time allowed for PIOs to update central equine database

Who is affected	Costs	Benefits
Passport Issuing Organisations and those using the Central Equine Database	As the EU regulation requires horse details to be updated within 15 days, PIOs will spend the same time uploading horse details to	This will keep the database up to date, as close to real time as possible, and will help improve enforcement of identification, horse welfare

[3] Assuming a failure rate of 0.001% over the lifetime of the horse (about 25 years) there would be about 24 failures a year costing about £1,000 a year to replace (see annex 2 on costs of microchipping). The cost to businesses and private owners would be about £500 to each sector. These costs are very low and would be lost in the rounded estimates shown on the summary pages above where estimates are shown to the nearest £100k.

	their own database. However, the changed deadline will require PIOs to give the activity higher priority which may be disruptive, involving resource and cost implications. PIOs will also need to upload the details by batch every working day, which takes on average 3 minutes, whereas currently they can choose the most convenient time over the 15 day period. This additional burden amounts to about £7k a year for PIOs (see annex 4 for details).	and food safety. Other users of the Database will also have access to up to date information. These benefits have not been monetised.

Public availability of horse details

EU legislation requires certain horse details held on CED to be made available to other Member States. The same system could be used by the public at negligible additional cost to Government to allow them to also search the database for limited non-personal information. Public access to data would enable owners to ensure that their records are correct, and would also be of use to businesses such as abattoirs to inform commercial decisions

Table 5 Public availability of horse details

Who is affected	Costs	Benefits
The government and users of the Central Equine Database.	Negligible cost – requires expanding already existing functionality to a wider user base	This is an attempt by the government to increase the benefits by making available data collected at public expense although the scale of the benefits cannot be monetised.

Pre-notification of changes to equine identification details

Owners are responsible for reporting changes of their horse's details, including ownership information, to PIOs. Anecdotally equine stakeholders state that levels of reporting are currently low, which creates difficulties for enforcement authorities and PIOs as the data they hold is out of date. Stakeholders, including the Equine Sector Council, believe that giving owners access to an optional online mechanism to notify PIOs of necessary changes to their records is vital to increasing reporting and therefore improving the efficacy of the regime. We have confirmed with Government Digital Service that this extra functionality would be simple to develop and does not require additional complexity such as GOV.UK Verify. Our assessment is therefore that the necessary functionality would provide significant benefits, and could be provided at low cost to Government

Table 6 Pre-notification of changes to equine identification details

Who is affected	Costs	Benefits
The government, horse owners whose details have changed, PIOs and users of the Central Equine Database.	The small but at this stage unknown cost of additional functionality of the database will fall to government. There is also a small cost for those who update the online facility associated with the time it takes them but this will be entirely voluntary and is an example of how we are seeking to use non-regulatory measure.	The benefits derive from having a greater rate of updating in relation to changes in horse and owner circumstances.

Database to notify changes in equine identification on behalf of PIOs

EU legislation requires CED to notify other Member State's databases of changes to horse's details in certain situations. It also requires PIOs to do the same thing themselves in other situations. The functionality that will have to be put in place to perform the notifications from CED could also be used at very low cost to Government to conduct the other, similar notifications on behalf of PIOs, making updates easier for PIO users and simplifying the overall process

Table 7 Database to notify changes in equine identification on behalf of PIOs

Who is affected?	Costs	Benefits
Government and PIOs (and users of data in other member states)	The cost (to government) of the additional functionality of the database is unknown but is expected to be very low or negligible	Relieves burden on PIOs and improves reliability of data-sharing between Member States

Familiarisation Costs

There are costs (to businesses and to private horse owners) associated with the need to become familiar with the requirements of the new regulation and the way the database works. These are estimated to amount to about £0.30m (details are set out in annex 3 below).

Summary of Costs

The costs associated with the various measures in this Regulation are shown in the table below. Further details showing the data and calculation method are given in annexes 2,3 and 4.

Summary of Costs (£m at 2015 constant prices)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Business											

Costs											
Familiarisation costs	0.127										0.127
Microchipping older horses	0.230	0.230	0.230								0.690
Update CED	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.070
Total Business cost	**0.364**	**0.237**	**0.237**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.887**
Private costs											
Familiarisation costs	0.174										0.174
Microchipping older horses	1.387	1.387	1.387								4.161
Total Private Costs	**1.561**	**1.387**	**1.387**								**4.335**
Total all costs	**1.925**	**1.624**	**1.624**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**5.222**

Summary of Costs (present value: discounted @ 3.5%)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Business Costs											
Familiarisation costs	0.127										0.127
Microchipping older horses	0.230	0.222	0.215								0.667

Update CED	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.005	0.005	0.060
Total business costs	**0.364**	**0.229**	**0.221**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.005**	**0.005**	**0.854**
Private costs											
Familiarisation costs	0.174										0.174
Microchipping older horses	1.387	1.340	1.295								4.022
Total Private Costs	**1.561**	**1.340**	**1.295**								**4.196**
Total all costs	**1.925**	**1.569**	**1.516**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.005**	**0.005**	**5.050**

Wider impacts

Small Businesses

No exact data is available, but most passport issuing and horse owning businesses are thought to be microbusinesses. This means that the EANDCB set out in Annex 2 will fall largely on smaller businesses. However, these businesses constitute the majority of those that produce and use horse passports. An exemption from legal requirements for small and microbusinesses has therefore been ruled out as it would critically undermine the effectiveness of the policy.

We will continue to work with the affected business to ensure that implementation approaches enable small businesses to comply with the legal expectations, for example by using a phased introduction for micro-chipping older horses.

Equivalent Annual Net Cost to Business

One In, Three Out (OI3O)

The measures monetised in this IA ~~is~~ are in scope of OI3O. Although the Regulation is EU derived, there are aspects that go beyond the minimum EU requirement and so should be counted as an IN. We estimate that the measures generates an equivalent annual direct net cost to business (EANDCB) of £0.1 million in 2014 prices and 2015 present value.

Annex I

Areas where the lowest cost approach is being taken, or existing gold plating is being maintained

Measure	Article	Description	Recommendation	Lowest cost / Existing gold-plating	Detail

Who is responsible for identifying a horse?	3.3	Option whether the owner of a horse, or its keeper, should be responsible for identifying a horse.	Maintain status quo of owner.	Lowest cost option	Responsibility for identifying a horse in England previously rested with its owner. Any change from this would introduce transition costs for businesses such as PIOs. In addition, horse keepers (if different from owners) are more likely to be part of a business. Changing the requirement to place new responsibility on keepers would introduce a new cost to these businesses.
Passport format	7.5	Option to set more restrictions on the format of passports	No additional restrictions on format	Lowest cost option	A standard format for passports is set out in EU legislation. Additional restrictions on passport format would impose cost on the private organisations that issue them. Horse-owning businesses also benefit from some flexibility in passport format - with some common additions being racing or performance information.
Passport application deadline	11.2	Member States must set time limits for passport applications to apply for a passport. It must be sufficient to meet the 12 months passport issue deadline.	Maintain status quo of application within 6 months of birth or before 31 December in the year of birth, whichever is the later	Lowest cost option	This retention is supported by most equine businesses to avoid the cost and confusion of change. The deadline is generous when the maximum allowable passport issue deadline is taken into consideration.
Passport issue deadline	12.1	Passports must be issued within 12 months of birth. Option for Member States to set stricter timescales.	Maintain the status quo by applying the maximum issue deadline of 12 months.	Lowest cost option	Provides the maximum flexibility for owners and passport issuing organisations which is best for business.
Alternatives to passports	25.1	There is a derogation for Member States to allow the use of smart cards (cards with information on a microchip), instead of a horse's passports for movement purposes	Maintain the status quo of allowing the use of smart cards	Lowest cost option	The option to allow smart card use as an alternative to passports for movement purposes would provide more flexibility to passport issuing organisations and owners.

Microchip location	18.2	Microchips are usually inserted into a ligament in the neck of a horse. There is a conditional option to allow microchips to be inserted in a different place in a minority of horses.	Maintain status quo of nuchal ligament	Lowest cost option	There is an option for microchips to be implanted elsewhere on the horse than in the neck. Veterinary advice is that microchip implantation should be restricted to within the nuchal ligament in the neck. This is also simpler, and there is no known cost saving associated with implantation at other sites. This is the lowest cost option as it saves time and money for owners and other businesses (eg vets), who can locate microchips easily on a horse.
Microchip numbers	19.1	Requirement to set rules to ensure microchip numbers are unique	Maintain status quo of vet to insert unique microchip	Lowest cost option	Those with the correct veterinary qualifications are currently required to insert microchips that comply with ISO standards ISO 11784 and ISO 11785. In order to meet these standards microchips must be uniquely numbered. Alternative options for ensuring the uniqueness of microchip numbers are more onerous on business and Government, as they require investment in new and complicated systems such as a central microchip numbering system. Any system would have to run parallel with the requirement for vets to insert ISO compliant microchips.
Notifying change to identification details	**27.1**	Changes to identity details (including ownership and food chain status details) must be notified to PIOs. There is an option for either owners or keepers who can be responsible for this	Maintain status quo by leaving owner responsible for updating identity via their PIO	Lowest cost option	Responsibility for all aspects of identifying a horse in England previously rested with its owner. Any change from this would introduce transition costs for businesses such as PIOs. In addition, horse keepers (if different from owners) are more likely to be part of a business. Changing the requirement to place new responsibility on keepers would introduce a new cost to these businesses.
Outline diagram	10.1	Member states may allow derogation from completion of outline diagram for ID only horses if horse is both microchipped and has a photo	Completing the outline diagram not necessary when chip and photo present	Lowest cost option	Microchips and photographs provide a strong link between a horse and its records. A silhouette diagram is not always of much benefit as they are difficult to read and horses' markings can change. Allowing flexibility on completion of silhouettes reduces costs for passport issuing organisations and owners without affecting food safety.

Minimum Qualification for inserting a microchip	18.3	Member States must set a minimum qualification for inserting a microchip	Maintain the status quo keep current minimum qualification of registered veterinary surgeon - normally a member of the RCVS (or equivalent professional body outside the UK)	Existing gold-plating	Due to the location of the chip, this is classified as veterinary surgery. Veterinary Surgeons Act 1966 (VSA) provides a general prohibition that veterinary surgery can be carried out only be a registered veterinary surgeon. This could not be altered by secondary legislation on equine identification. This requirement was contained in the previous domestic equine identification legislation.
Foals moving to slaughter	26.2	Member States have the option to allow foals to move straight to slaughter before being identified with a passport	Maintain status quo of allowing foals to move straight to slaughter without a passport	Lowest cost option	At present unpassported foals can be moved straight to slaughter. As foals they will not have been exposed to medicines that will harm the food chain. This is the lowest costs options as it saves keepers the cost of getting their foals passported prior to slaughter.
Ownership Updates	27.1.d	Member States have the option to make ownership updates mandatory	Status quo of mandatory ownership updates	Existing gold-plating	Maintaining up to date ownership records is important for an element of traceability and protection of the food chain. This requirement was contained in the previous domestic equine identification legislation.

Alternative Identifiers to microchips	21.1	Member States have the option to allow alternative identifiers	Allow use of temporary alternative identifiers, but only for wild or semi-wild animals moving off derogation areas.	Existing gold-plating	Microchips are the best way to ensure accurate identification and food safety. However, wild and semi-wild horses have specific welfare issues around microchipping as they are not used to being handled. The breeding of wild and semi-wild horses is not controlled in the same way as domesticated horses. They are also unlikely to have been treated with veterinary medicines. The use of temporary rump stickers which are cheaper and easier to apply than microchips is a solution to this problem and allows for humane and cost effective population control by enabling movement off the designated areas either direct to slaughter, or into domestic use where full identification must be carried out including the implantation of a microchip. This is not suitable for use by the wider equine population as availability would de-incentivise breeders from obtaining passports for their foals within the legally required timeframe, and issues around population control for wild and semi-wild populations do not apply to domesticated equines. This requirement was contained in the previous domestic equine identification legislation.
Movement off derogation area	13.1.a	Movement of derogation area animals off the derogation area other than straight to slaughter	Allow the movement of derogation area ponies into domestic use or off the area using an alternative mark (rump sticker), with application for full identification, including implantation of a microchip to be carried out within 30 days of arrival on the destination holding.	Existing gold-plating	EU regulations are unclear, but legal advice is that we can carry on the practice which is the most practical solution to the problem. This requirement was contained in the previous domestic equine identification legislation

Notifying change to food chain status	37.4&5	Member States are responsible for choosing whether keeper, owner or vet are responsible for notifying PIO of food chain status changes.	Maintain status quo of owner.	Lowest cost option	Responsibility for notifying changes for a horse in England previously rested with its owner. Any change from this would introduce transition costs for businesses such as PIOs or vets. In addition, horse keepers (if different from owners) are more likely to be part of a business. Changing the requirement to place new responsibility on keepers or vets would introduce a new cost to these businesses.
Suspension from slaughter	31.1	Member States have the option to suspend (not exclude) horses from slaughter when horse has late/duplicate passport	To maintain the status quo and continue to exclude horses with duplicate passports completely from the food chain.	Existing gold-plating	Duplicate/replacement passports are issued where a passport has been lost. Expert veterinary advice is that it is not possible for an owner to prove whether their horse has been treated with dangerous medications during the period that the passport was unavailable. This requirement was contained in the previous domestic equine identification legislation.

Annex 2: Microchipping of horses born before 2009

This annex sets out the cost of microchipping older horses, i.e. those born before 2009. There are very few official statistics relating to horses and the population size and age distribution are not collected. Data needed to undertake the cost calculations below have been estimated using information from numerous sources, we have approached a sample of veterinary surgeons and passport issuing organisations to judge typical charges for microchipping and passport updating Costs vary, but it would be disproportionately costly for government to undertake surveys to collect this information.

A recent report (Removing the Blinkers – World Horse Welfare – June 2015), puts the UK equidae population at 796,000. From this we subtract those horses believed to be registered by Wetherby's (horses associated with the racing sector) using information in 'The Case for Retrospective Microchipping' (Equine Sector Review). Racing horses, regardless of age, are all expected to be microchipped. This gives a UK non-racing population of 428,000.

Using information in 'The Case for Retrospective Microchipping' (Equine Sector Review) we were able to generate the following age distribution of horses in the UK.

UK age distribution of equidae (excluding racing sector)

	2016	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**	**2006**	**2005**	**Before 2005**	**Total**
Age in 2017	1	2	3	4	5	6	7	8	9	10	11	12	>12	

%	8.6	8.5	8.4	8.3	8.2	7.9	7.6	7.1	6.6	6.0	5.3	4.6	13.0	100
Horses by year of birth (1)	36,722	36,337	35,952	35,610	34,882	33,769	32,314	30,474	28,248	25,680	22,770	19,474	55,768	428,000
Horses born before 2009, by year of birth (1)	-	-	-	-	-	-	-	-	28,248	25,680	22,770	19,474	55,768	151,940

(1) Not including those in the racing sector

Using data and analysis contained in a further report[4] we estimate the proportion of UK horses in England is about 75% and the proportion owned by businesses according to the British Equestrian Trade Association is about 14%. This means that about 113,955 horses born before 2009 will need to be microchipped in England of which about 15,954 are owned by business.

Components of the cost of microchipping a horse are shown in the table below.

Cost per horse of microchipping and recording details with Passport Issuing Organisation (at 2015 prices)

Description	Cost (£/horse)	Source/Comments
Microchip insertion	26.25	Typical veterinary charge for insertion of a microchip during a routine visit (Equine Industry Report)
Cost of passport update	13.50	Typical charge levied by PIO for updating passport (Horse Passports Agency)
Postage	0.95	
Value of private owner time (15 minutes)	7.05x0.25=1.76	Value of travel/leisure time (DfT). This assumes it takes someone about a quarter of an hour to undertake the paperwork associated with recording the microchip number with the PIO.
Value of business owner time (15 minutes)	7.78x1.3x0.25=2.53	Median gross hourly pay related to raising horses and equines (ASHE 2015) increased

[4] Summary of current knowledge of the size and spatial distribution of the horse population. Lisa A Boden, Tim DH Parkin, Julia Yates, Dominic Mellor and Rowland R Kao (BMC Veterinary Research 2012)

		by 30% to cover employer NI contribution and other employment costs.

It is assumed that microchipping will occur on a routine visit by the vet so no veterinary travel time is included. Multiplying the cost per horse by the number of horses gives the total cost of microchipping horses born before 2009:

Privately owned horses: 98,001x£42.46= £4.161m

Business owned horses: 15,954x£43.23=£0.69m

This regulation will come into effect in 2017 but owners will be given a three year period to comply. We assume that the restrospective microchipping will be uniformly distributed across the three years: 33% of the necessary microchipping will occur each year. As a result, the cost of micro chipping is expected to be spread over three calendar years as shown in the table below:

Cost of microchipping horses born before 2009 (£m)

	2017	2018	2019	Total
At 2015 constant prices				
Privately owned horses	1.39	1.39	1.39	4.16
Business owned horses	0.23	0.23	0.23	0.69
Total	1.62	1.62	1.62	4.85
Present Value (2017 base year, discounted @ 3.5%)				
Privately owned horses	1.39	1.34	1.29	4.02
Business owned horses	0.23	0.22	0.21	0.67
Total	1.62	1.56	1.51	4.69

At 2015 constant prices the total cost is £4.85m (2017 present value £4.69m) of which about £0.69m (2017 present value £0.67m) falls to business. The EANDCB (at 2014 constant prices and 2015 present value base year) is £0.1m.

Annex 3: Familiarisation Costs

There are one-off costs associated with horse owners and PIOs familiarising themselves with the new regulations and procedures.

Data and assumptions.

Familiarisation is expected to take about 2 hours for PIOs and about 10 minutes for horse owners.

There are 51 PIOs in England.

Of the roughly 597,000 horses in England about 297,000 are privately owned. Each owner owns on average of 2 horses. Business owners own about 4 horses each on average.

Privately owned horses: 297,000/2 horses per owner x £7.05 x 0.166 hours = £174k

Business owned horses: 300,000 / 4 horses per owner x £7.78 x 0.166 hours x 1.3 = £126k

Passport Issuing Organisations: 51 x 2 hours x £7.78 x 1.3 = £1k

At 2015 constant prices, the total cost is £0.3m (2017 present value £0.3m) of which about £0.2m (2017 present value £0.2m) falls to business.

Annex 4: Reduction in time allowed for Passport Issuing Organisations to update the Central Equine Database

This annex sets out the cost and resource burden to businesses associated with reducing the time allowed for PIOs to update the central equine database from 15 days to 1 day.

PIOs will typically create and modify records on their internal database upon receiving changes to horse details from the horse owner or responsible agent. The PIOs will then undertake a batch upload consisting of multiple new records and modifications from their database to the central equine database.

The reduction in the time allowed for PIOs to update the CED from 15 days to 1 day will not alter the time needed for creating and modifying records on the internal PIO database given that these details will need to be uploaded regardless of the regulatory change. Nevertheless, it may be disruptive to PIOs as the window allowed for uploading will shorten significantly, which may necessitate a greater staff presence or displace other urgent work. This additional burden would be difficult to monetise as it depends on the opportunity cost of staff time (over and above the pay costs of staff) but the difficulty or otherwise of the deadline for updating will be explored with PIOs during the consultation.

Nevertheless, the requirement to update the CED in 1 day is likely to increase the frequency in which PIOs undertake batch uploads. Currently, PIOs can choose the optimal time to upload a batch to the CED as long as it is within 15 days of receiving the horse details. It is likely that PIOs would upload the batch when they have received the maximum number of new / updated records within the timeframe.

It is likely that PIOs will need to update a batch every working day under the changed requirement given the frequency of new horse details received by PIOs. Analysis from the CED outline business case suggests that the new database will receive approximately 73,000 new record creations and 185,000 record modifications per annum[5].

Assuming that updates are distributed evenly across the year and PIOs, a batch per day per PIO will be required. As there are 252 working days in a year (260 – 8 bank holidays) and 51 PIOs, 12,852 batch uploads will be required each year.

252 days x 51 PIOs = 12,852

[5] Based on information provided by PIOs relating to their activity in the 2013/14 financial year.

Assuming that PIOs upload batches in 15 day intervals[6], utilising the maximum time available, there would be 1,241 batch uploads per year. Therefore, the changed requirement would result in 11,611 additional batches per year.

12,852 – 1,241 (365 days / 15 day interval x 51 PIOs) = 11,611

A data gathering exercise based on consultation with PIOs for the CED outline business case found that 3 minutes was the average time required to carry out a batch upload.

11,611 x 3 minutes = 581 hours

Using the median gross hourly pay[7] related to administrative and support services - £9.3 - (uprated by 30% to cover NI contribution and other employment costs), the total annual cost of the additional batch uploads is £7,019.

581 hours x £9.3 x 1.3 = £7,019 per annum

Annual cost of batch uploads

Year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
2015 constant prices	£7,019	£7,019	£7,019	£7,019	£7,019	£7,019	£7,019	£7,019	£7,019	£7,019
Present value (2017 base year)	£7,019	£6,781	£6,552	£6,331	£6,117	£5,910	£5,710	£5,517	£5,330	£5,150

At 2015 constant prices the total cost is £0.1m (2017 present value £0.1m) of which all costs fall to business.

[6] In practise, it is likely that PIOs, especially the larger ones, would upload batches more regularly.

[7] ASHE 2015.