

Summary: Intervention & Options

Department /Agency: Defra	Title: Impact Assessment of TSE responsibility and cost sharing proposals	
Stage: Final	Version: 20	Date: 09 December 2008
Related Publications:		

Available to view or download at:

<http://www.defra.gov.uk/corporate/consult/ahw-nextsteps/index.htm>

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

Transmissible Spongiform Encephalopathies (TSEs) are incurable brain diseases, which include BSE in cattle and scrapie in sheep. The controls that apply in the UK are set out in European legislation (Reg (EC) No 999/2001). The Government, that is the taxpayer, currently pays for the extensive testing programme for BSE in cattle and the related controls. The Government also funds the National Scrapie Plan genotyping programme for sheep, which was designed to breed for resistance to classical scrapie that might mask BSE. There is a need to reduce costs to the minimum and to share them with industry.

What are the policy objectives and the intended effects?

The changes announced on 30 September 2008 aim to maintain all necessary measures to protect public and animal health but to share the costs more fairly with industry where industry is currently receiving a direct or indirect benefit from measures funded by the Government. The cattle controls are linked to a continuing EU legal requirement to carry out a BSE testing programme. The sheep schemes were voluntary and in future, farmers will be able secure similar services but will need to fund these themselves.

There is no risk that these proposals would lead to an increase in animals infected with BSE. BSE is transmitted through contaminated feed and nothing in these proposals would reduce the current strict controls on feed for all farmed livestock.

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

We have considered maintaining the current fully Government funded schemes but this can no longer be justified. This is because (a) the cattle industry is now able to profit from selling cattle aged over 30 months (OTM) for human consumption subject to BSE testing and the EU export ban has been lifted and (b) it is no longer necessary to impose a compulsory genotyping programme upon the sheep breeding industry. We have concluded that continued Government funding of these schemes could be justified only on a temporary basis and only for brain stem sampling of fallen cattle and for a proportion of Meat Hygiene Service (MHS) charges. However to aid the transition, we have agreed to provide £1.26m funding for one year for fallen cattle that still need to be tested for BSE.

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

Policy on BSE and scrapie is kept under continuous review. Cost sharing measures will be reviewed one year after implementation.

Ministerial Sign-off For consultation stage Impact Assessments:

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

Signed by the responsible Minister:

..... Date:

Summary: Analysis & Evidence

Policy Option: BSE cost sharing

Description: moving from Government to industry funding of BSE measures

ANNUAL COSTS		Yrs	Description and scale of key monetised costs by 'main affected groups' Overall, this is a transfer of activity and costs, from Government to the cattle industry. The cattle industry, in its widest sense, will take over the costs of BSE testing and processing OTM cattle sold for human consumption and resume responsibility for the disposal of fallen cattle aged over 24 months. Costs are being phased in from Sept 2008 with the final measure (charging for MHS costs) implemented on a progressive basis from 2009/10. From 2009/10, we estimate an additional cost to industry of around £25.41m. Further details may be seen in Table 1 of this IA. The figures shown in this summary are the <i>additional</i> costs of the activities arising from the transfer – essentially those relating to laboratory approvals. See also the assumptions below.
One-off (Transition)			
£ 0.12m			
Average Annual Cost (excluding one-off)		10	Total Cost (PV) £ 0.4m
£ 0.04m			
Other key non-monetised costs by 'main affected groups'			
ANNUAL BENEFITS		Yrs	Description and scale of key monetised benefits by 'main affected groups' Because, overall, this is a transfer of activity and costs, taxpayers are the key beneficiaries, benefiting from a reduction of £25.37m per year in the cost of funding BSE controls and testing. Details of these reductions may be seen in Table 1 of this IA. It is difficult to be precise about likely costs to industry after the transfer so the figures in this document assume a worst-case scenario straight transfer of costs to industry at the same rate currently paid by Government. In reality, industry is likely to be able to secure greater efficiencies in disposal of cattle and in contracting private laboratories, both in a more competitive market. Key assumptions regarding efficiencies are set out at section 2.2
One-off			
£ 0			
Average Annual Benefit (excluding one-off)		10	Total Benefit (PV) £ 0m
£ 0			
Other key non-monetised benefits by 'main affected groups' Abattoirs - opportunity to use alternative arrangements for BSE testing of cattle for human consumption. Cattle farmers - opportunity to use alternative disposal routes for fallen cattle aged over 24 months and encouragement to improve the health and welfare of adult cattle because they must be fit to travel to an abattoir if the cost of disposing of them as fallen stock is to be avoided.			

Key Assumptions/Sensitivities/Risks:

Testing costs are based on current EU requirements which require all healthy cattle aged over 30 months slaughtered for human consumption and all fallen cattle (those that die or are slaughtered other than for human consumption or under the Older Cattle Disposal Scheme) aged over 24 months to be tested for BSE. These requirements are likely to reduce significantly from January 2009 but for the purpose of this document, we are using the higher requirements. We have assumed a net cost of £11 per BSE test (£15 less an EU contribution of £4). Actual costs to individual abattoirs are likely to depend on the volume of samples submitted for testing and the level of competition between laboratories. The net cost to most abattoirs is likely to be lower than £11.

The benefits outlined above assume all cost-sharing proposals are implemented in full to the delivery dates set out in table 4 below. The only transitional arrangements that will apply are the phased introduction of MHS charging and the one-off £1.26m for fallen cattle for one year only.

While these proposals are concerned only with Defra related costs, it should be noted that FSA are also proposing to charge for other MHS costs. These costs should be borne in mind when considering the total cumulative effect of cost sharing on industry.

Price Base Year 2007	Time Period Years: 10	Net Benefit Range (NPV) £-0.4 to £0m	NET BENEFIT (NPV Best estimate) £-0.4m
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What is the geographic coverage of the policy/option?		England		
On what date will the policy be implemented?		Phased from Sept 08		
Which organisation(s) will enforce the policy?		Industry will assume responsibility for cost		
What is the total annual cost of enforcement for these organisations?		As above		
Does enforcement comply with Hampton principles?		Yes		
Will implementation go beyond minimum EU requirements?		No		
What is the value of the proposed offsetting measure per year?		N/A		
What is the value of changes in greenhouse gas emissions?		N/A		
Will the proposal have a significant impact on competition?		No		
Annual cost (£-£) per organisation: Farms (excluding one-off):	Micro £670	Small 0	Medium 0	Large 0
Are any of these organisations exempt?	No	No	No	No

Impact on Admin Burdens Baseline (2005 Prices)

Increase	£	Decrease	£	Net	Negligible
					Negligible
Key:		Annual costs and benefits: Constant Prices		(Net) Present Value	

Summary: Analysis & Evidence

Policy Option: Scrapie Cost sharing	Description: moving from Government to industry funding of voluntary scrapie measures
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COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' The voluntary Ram Genotyping Scheme (RGS) will close on 31 March 2009 but sheep farmers can use commercial genotyping services. The National Sheep Association (NSA) and the Rare Breeds Survival Trust (RBST) are expected to take over the NSP semen archive from Dec 08 at a maximum cost of £20k per annum. In the case of the semen archive and the SMS, responsibility for the costs will transfer from Government to industry but it is expected that industry will be able to seek out lower cost solutions less available to Government (see section 2.2)
	One-off (Transition)	Yrs	
	£ 0		
	Average Annual Cost (excluding one-off)		
£ 0		Total Cost (PV)	£ 0

Other key non-monetised costs by 'main affected groups'
 Sheep breeders: if industry do not take these schemes on then a genetic resource (semen archive) will be lost

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' This is a transfer of activities and costs. Taxpayers are the main beneficiary, benefitting from a reduction in the cost of funding scrapie related schemes (valued over 10 years). Details of these reductions may be seen in table 1	
	One-off	Yrs		
	£ 0			
	Average Annual Benefit (excluding one-off)			
£ 0.97m		10	Total Benefit (PV)	£8.1m

Other key non-monetised benefits by 'main affected groups'
 Sheep farmers can benefit from the opportunity to exert greater control over genotyping, the semen archive and the new Scrapie Monitoring Scheme, especially in terms of simplifying current arrangements.

Key Assumptions/Sensitivities/Risks Assumes no changes to the EU position that genotyping does not now have to be made compulsory in breeding flocks, and that the scientific assessment remains that there is a zero to negligible risk of BSE in the UK flock.

Price Base Year 2007	Time Period Years 10	Net Benefit Range (NPV) £ 0 - £8.1m	NET BENEFIT (NPV Best estimate) £8.1m
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What is the geographic coverage of the policy/option?	England
On what date will the policy be implemented?	From Sept 08
Which organisation(s) will enforce the policy?	None
What is the total annual cost of enforcement for these organisations?	N/A
Does enforcement comply with Hampton principles?	Yes
Will implementation go beyond minimum EU requirements?	No
What is the value of the proposed offsetting measure per year?	£ 0
What is the value of changes in greenhouse gas emissions?	£ 0
Will the proposal have a significant impact on competition?	No

Annual cost (£-£) per organisation (excluding one-off)	Micro 0	Small 0	Medium 0	Large 0
Are any of these organisations exempt?	No	No	No	No

Impact on Admin Burdens Baseline (2005 Prices)

(Increase - Decrease)

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

Key:

Annual costs and benefits: Constant Prices

(Net) Present Value

Evidence Base (for summary sheets)

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

1. Why share responsibilities and costs, and who will be affected?

1.1 Why share responsibilities and costs

1.1.1 Government intervenes in animal health and welfare to protect human health, protect and promote the welfare of animals, protect the interests of the wider economy, environment and society, and protect international trade. Government funded animal health controls in GB currently cost some £400 million per year.

1.1.2 This document covers seven specific TSE measures described at 1.4.3 below where there are direct industry beneficiaries from Government funded schemes and where the justification for funding by the taxpayer no longer exists. This is because BSE testing of cattle aged over 30 months (OTM) has become well established and should now be treated as a normal production cost; the EU export ban has been lifted; and the Government's independent Spongiform Encephalopathy Advisory Committee (SEAC) has concluded that the public health benefit of the Ram Genotyping Scheme is now likely to be negligible. The TSE responsibility and cost sharing measures lie within a wider exercise which is examining responsibility and cost sharing across the full range of Government expenditure on animal health and welfare. Some activities have already ceased e.g. routine brucellosis testing of beef breeding cattle. Other activities are under review.

1.1.3 The TSE proposals aim to increase the share of the costs of animal health and welfare controls borne by the livestock and abattoir industries whilst also increasing their responsibilities to make decisions, such as to which laboratories an abattoir should send its brainstem samples for BSE testing, or how livestock producers should best dispose of their fallen cattle aged over 24 months.

1.1.4 We have considered maintaining the current fully Government funded schemes i.e. the 'do nothing' option, and have concluded that this can no longer be justified. Firstly, those individuals in the cattle industry that directly benefit from the four BSE measures should no longer be provided with a free service at taxpayers' expense and secondly, there is no public health or international trade benefit from continuing with the three scrapie measures. We have also considered seeking to recover from industry a wider range of costs. We will still fund brain stem sampling and testing of fallen cattle and a progressively decreasing percentage of MHS costs for administration and enforcement of controls on OTM cattle in abattoirs. We have concluded that we should not at this stage seek to recover the former costs because they go beyond those normally faced by farmers in disposing of fallen cattle. However, these costs should be considered as candidates for levy funding in the future. Full recovery of MHS costs would be appropriate once MHS and the industry working together have secured further mutual efficiencies in operating methods to enable MHS costs to be reduced. We have also concluded that the taxpayer should continue to fund the scrapie testing programme for sheep and goats at this stage because it is based on a sample of animals. It would be difficult to charge individuals whose animals happened to be selected at random for testing but this should also be a candidate for levy funding in the future.

1.1.5 This initiative is part of Government's Responsibility and Cost Sharing Programme, which was consulted on in December 2006¹ and December 2007². A further consultation is expected

¹ Consultation on responsibility and cost sharing for animal health and welfare: principles
<http://defraweb/corporate/consult/ahw-respcosts/index.htm>

² Consultation on 'Responsibility and cost sharing for Animal Health and Welfare: next steps – your views matter'
<http://defraweb/corporate/consult/ahw-nextsteps/index.htm>

shortly. It contributes to the implementation of the Animal Health and Welfare Strategy³ and the Farm Regulation and Charging Strategy⁴.

1.1.6 The scope of this document is limited to England. However, the Scottish Government and the Welsh Assembly Government will effect the same changes in Scotland and Wales. The position in Northern Ireland will be announced shortly.

1.2 Desired outcomes

1.2.1 We want to develop a more mature relationship between Government and industry as a whole, including farmers, meat processors and the Animal By-Products (ABP) sector, and to redistribute the costs of TSE controls in a more appropriate manner. This is not about lowering standards; rather it aims to lead to more proportionate, flexible, risk-based approaches.

1.2.2 The transfer of costs or charges involved in the four BSE measures will not increase the risk of a renewed BSE epidemic in cattle or of transmitting variant CJD to humans through bovine products. Cattle become infected with BSE as a result of eating feed contaminated with the remains of BSE infected animals and nothing in the new arrangements will affect the current rigorous ban on feeding animal protein to farmed livestock, which is the main animal health protection measure. Similarly, the risk to public health will not increase because these changes do not affect controls on animal feed or other BSE controls, particularly controls on the removal of specified risk material (SRM) in abattoirs and cutting plants. SRM controls are the main public health protection measure and have been estimated to remove over 99% of any infectivity, if present. Action as required under EU and national legislation when BSE is confirmed in cattle will also remain unchanged.

1.2.3 The main risk from scrapie is that it may mask BSE. However, SEAC has concluded that the prevalence of BSE in the UK sheep population is likely to be either zero, or very low, if present at all⁵. Classical scrapie has been present at low levels in the national flock for nearly 300 years and is not considered a risk to public health, although there remain uncertainties particularly in relation to atypical scrapie. From an animal health perspective, given the low level of scrapie infected flocks and the low prevalence of scrapie within these flocks, the closure of the Ram Genotyping Scheme will not lead to any significant increase in the incidence of the disease. The transfer of the semen archive and the Scrapie Monitoring Scheme will have no effect on the prevalence of scrapie in sheep and goats. Action as required under EU and national legislation when scrapie is confirmed in sheep or goats will remain unchanged and will continue to reduce the prevalence and incidence of the disease.

1.2.4 A further desirable side effect of industry bearing more of the cost of TSE measures is that this should widen the scope and increase the speed with which operating efficiencies are secured. This is discussed in more detail at section 2.2. For example, abattoirs will be likely to work more closely with MHS in ways that should enable MHS to reduce its staffing and overtime costs if abattoirs were to fund those costs through a new time-based charging system. Similarly, when the sheep industry becomes responsible for the storage and administration of the semen archive, it might find lower cost solutions less available to Government.

1.2.5 The Government, and hence the taxpayer, would continue to bear a proportion of cost for other animal health and welfare controls. In sharing the responsibilities and costs of animal health and welfare, we aspire to reduce the regulatory burden and to minimise the costs to be borne by the industry by making it as simple and cheap as possible to meet any requirements.

1.3 The approach to sharing responsibilities and costs

1.3.1 The Government has a four-tiered approach to delivering our cost sharing proposals:

- Secure efficiency savings where possible, including stopping work which is no longer required;

³ Animal Health and Welfare Strategy for Great Britain (2004). Full text available at www.defra.gov.uk/animalh/ahws/strategy/ahws.pdf

⁴ Partners for Success: A Farm regulation and Charging Strategy, Defra (2005). Full text available at www.defra.gov.uk/farm/policy/regulation/charge/pdf/farm-regulation-strategy.pdf

⁵ SEAC Sheep Subgroup Statement: <http://www.seac.gov.uk/statements/sheepsubgrp-statement131006.pdf>

- Transfer responsibility for activities to those who are better placed to carry them out (including the industry), or better placed to commission them and pay for them. This approach has the advantage of not expecting industry to pay for expensive Government overheads;
- Charge all or a proportion of costs where services are identified as being for the benefit of the individual livestock keeper or business rather than the collective industry. Charges could be on the basis of a standard cost per unit or based on actual costs, eg: in terms of hours worked;
- Raise funds through, for example, a levy to fund activities that benefit the industry or a sector collectively.

1.4 Why have these seven measures been chosen for cost sharing

1.4.1 The Government funded BSE testing system for OTM cattle born after July 1996 and slaughtered for human consumption has been in place since November 2005. These controls were put in place in order to allow the OTM rule to be changed – a change from which the cattle sector has benefited financially. Government funding made it easier to effect a smooth transition. The Food Standards Agency (FSA) Board agreed that the system was robust in July 2007. Similarly, Government took on the cost of collection and disposal of fallen cattle aged over 24 months to ensure that all such cattle were tested so that there were no related obstacles to lifting the EU export ban. The export ban was lifted in May 2006. The time has now come for industry to share the cost of these controls.

1.4.2 The National Scrapie Plan (NSP) breeding programme was introduced to eradicate classical scrapie, which could have been masking BSE in sheep. The sheep semen archive was introduced to ensure that valuable traits were not lost as a result of the selective breeding programme for scrapie resistance and to enable the reintroduction of genotypes reduced through the NSP if new TSE strains emerged that compromised classically resistant genotypes. Now that the EU Commission has decided not to proceed with compulsory genotyping and SEAC has concluded that the prevalence of BSE in the UK sheep population is likely to be either zero, or very low, the need for the ram genotyping scheme and the semen archive has diminished. The December 2007 consultation proposed that the RGS should close unless industry were able to submit a compelling business case as to why the taxpayer should continue to make a contribution. NSA submitted a business case but it was insufficient to justify continued funding by the taxpayer. Separately, NSA and RBST expressed interest in taking over the semen archive and SAC offered to administer a new industry-funded SMS.

1.4.3 The outcome on TSE responsibility and cost sharing consultation is as follows:

- **transfer responsibility for arranging and paying for the analysis of brainstem samples from OTM cattle slaughtered for human consumption** to abattoirs from 1 Jan 09. Abattoirs can choose to use any laboratory approved to carry out BSE tests (management of the laboratory needs to be entirely separate from abattoirs).
- **Charge laboratories for approval to carry out BSE testing** from Sept 08. The Veterinary Laboratories Agency (VLA) will approve individual laboratories to carry out BSE testing. The costs will be charged to the laboratory. To maintain approval, laboratories will need to participate in quality assurance exercises and be subject to ongoing dialogue with VLA, which will include an annual workshop. There will therefore also be an annual charge to maintain the approval.
- **Charge a proportion of MHS costs for enforcing controls on BSE testing of OTM cattle in abattoirs. In addition, charge for enforcing SRM controls and increase the proportion of the cost of hygiene controls that is funded by abattoirs.** Defra currently funds these SRM costs and the proportion of the hygiene costs that is not funded by abattoirs under an agreement with FSA to pay for costs arising as a result of changes to the OTM rule. With the co-operation of abattoirs and MHS, it should be possible to achieve efficiencies in this area and it is for this reason that we proposed to charge only a proportion (£2.4m) of the costs. This proportion has been further reduced to an initial £0.126m in 2009/10 (increasing by the same amount annually) in order to harmonise with FSA and MHS plans to transform the MHS and to move to a new time-based charging system.
- **Transfer responsibility for the collection and disposal of adult fallen cattle back to livestock producers**, where it properly belongs, from 12 Jan 09. Government will provide £1.26m transitional funding for one year to assist industry with the collection and disposal

costs of adult fallen cattle that continue to need a BSE test. Government will also continue to pay for brainstem samples to be taken and analysed. However, this could be a candidate for levy funding in the future.

- **Ram Genotyping Scheme (RGS)** – no new members accepted after 30 Sept 08 with farm visits ending in Dec 08 and the scheme formally closing in March 09.
- **Transfer responsibility for the semen archive to industry** from Dec 08.
- Finally, to **transfer responsibility for administering a Scrapie Monitoring Scheme** to the Scottish Agricultural College (SAC).

1.4.4 The costs attributed to the cattle industry would be diminished if we were able to put in place a reduced BSE monitoring programme for the UK. EU legislation that would allow the UK to raise the minimum BSE testing age for both healthy slaughter and 'risk' cattle to 48 months from 1 January 2009 should come into effect in December. The age for testing cattle will not be increased until this has been agreed by the Food Standards Agency Board and UK Health Ministers.

Table 1: Forecast cost to Government and industry of TSE activities. Note: These costs relate to England only

Activity to be cost shared	If activities are NOT transferred		Proposed cost sharing mechanism	If activities are transferred/stopped		
	Cost to taxpayer (£m)	Cost to industry (£m)		Cost to taxpayer (£m)	Cost to industry (£m)	Industry sector affected and resulting cost
Analysis of BSE samples taken from OTM cattle entering the food chain (a)	3.8	0.0	Transfer	0.0	3.8	Beef & dairy sector: £2.5m Abattoirs: £1.3m
Approval of laboratories wishing to carry out BSE tests (b)	0.04	0.0	Charge	0.0	0.12 initial approvals 0.08 annual charges	Laboratories: £0m Abattoirs: £0.04m for initial approvals £0.03m annual charges Beef & dairy sector: £0.08m for initial approvals £0.05m annual charges
MHS enforcement of BSE testing controls and other Defra funded controls for OTM cattle entering the food chain (c)	5.7	0.0	Charge	5.574 in 2009/10, reducing by an additional 0.126 each year	0.126 in 2009/10 plus an additional 0.126 in each subsequent year	Beef & dairy sector: £0.08m initially, and an additional £0.08m each year Abattoirs: £0.04m initially, and an additional £0.04m each year
Collection and disposal costs associated with over 24 month old fallen cattle requiring a BSE test (d)	21.4	0.0	Transfer	0.0	21.4	Beef & dairy sector: £21.4m
National Scrapie Plan (NSP) Ram Genotyping Scheme (e)	0.83	0.0	Stop (or transfer)	0.0	0.0	Sheep sector: £0.0m
NSP semen archive (f)	0.08	0.0	Stop (or transfer)	0.0	0.01	Sheep sector: £0.01m
Scrapie Monitoring Scheme (SMS) (g)	0.06	0.0	Stop (or transfer)	0.0	0.0	Sheep & goat sector: £0.0m

Notes

(a) Figures for post transfer of responsibility are based on an average net sample cost of £11 and a forecast GB throughput of 550,000 OTM cattle, apportioned to England only (i.e. 347,000 samples) according to cattle distribution on 1 June 2007 using BCMS and Census data. It is assumed that 1/3 of the new cost would fall to abattoirs and 2/3 passed to farmers. For the basis of this document the cost to Government, should activities not be transferred, has also been assumed to be £11 (£15 less an EU contribution of £4) although in practice it would be lower because Government as a single customer could purchase in bulk. If the testing age is increased to 48 months on 1 January 2009, the number of samples in England would fall to 260,000 which would save industry about £1m @ £11 per sample (beef and dairy sector £0.6m; abattoirs £0.3m). In addition, industry would save the cost of taking samples etc in abattoirs from cattle aged 30 – 48 months.

- (b) The cost of each laboratory seeking initial approval and maintaining annual approval to carry out BSE tests is forecast at £0.03m and £0.01m respectively. Four laboratories will not incur an initial approvals charge post transfer but will be required to pay £0.01m each for maintaining approval. If laboratory approval costs were not transferred to industry it is assumed taxpayers would continue to fund the £0.04m annual charge for maintaining approval of these four laboratories. Post transfer we have assumed that no more than four additional laboratories will proceed to full approval and that costs will be passed in full by the laboratory down the line with 1/3 absorbed by abattoirs and 2/3 passed to farmers.
- (c) Figures are based on forecast GB MHS costs of £9m of which Government would be looking to recover £0.2m (GB) from industry in 2009/10, and an additional £0.2m in each subsequent year (i.e. £0.4m in 2010/11, £0.6m in 2011/12 and so on). The GB figure of £0.2m has been apportioned to England at £0.126m according to cattle distribution across GB using BCMS and June 07 Census data. Post transfer, it is assumed that 1/3 of the cost would be absorbed by abattoirs and 2/3 passed to farmers. Further efficiency savings are envisaged and the intention over time is to move to full cost recovery.
- (d) Without a transfer of responsibility, figures are based on the cost of collecting and disposing of 142,000 fallen cattle aged over 24 months in England at a cost of about £150 per animal leading to a total cost to taxpayers of approximately £21.4m. Post transfer, we have assumed the same number of animals at a similar average cost per head with farmers incurring the full amount. NB: collection and disposal costs vary widely across the country and the cost to some farmers could be more whilst the cost to others could be significantly lower. No account has been taken of transitional funding of £0.126m provided to the National Fallen Stock Company because this will be for a period of one year only, beginning on 12 January 2009. If the testing age for fallen cattle is increased to 48 months on 1 January 2009, the number of samples in England would fall to 106,312. However, there would be only small savings to industry because they will be responsible for the collection and disposal of all cattle aged over 24 months irrespective of the age above which they must be tested. It should be possible to dispose of some cattle that do not need to be tested at a lower cost. However, most fallen cattle are likely to end up at the same, relatively few, relatively large, disposal sites.
- (e) NSP figures assume that if the RGS was not stopped then Government would maintain it at a cost to the taxpayer similar to 2007/08 costs in England, eg: £825,000 based on the approximate number of RGS samples received from English premises (around 50% of GB total). As the RGS will close in March 09, no costs will be incurred after this date.
- (f) Collections for the semen archive were completed in March 2008 and it is located in two different sites in GB. The future storage and administration costs of the archive, after it transfers to industry, are estimated to be up to £20,000 per year on a GB basis. They could be much less depending on how and where the archive is stored and if it is rationalised for conservational only purposes. Current costs to Government are significantly higher at about £75,000.
- (g) The SMS currently costs some £100,000 to administer in GB and has fewer than 350 members of which approximately 210 are in England. From Jan 09 the Scottish Agricultural College (SAC) will administer a new SMS within its Premium Sheep and Goat Health Scheme. The cost of administering the scheme following transfer is estimated to be about £50 per member.

1.4.5 The costs identified in table 1 are subject to some uncertainties particularly in relation to the extent to which industry can secure efficiency savings when they become responsible for these costs. If large-scale genotyping comes to an end, the costs of genotyping a smaller number of samples are likely to increase. However, it would be for individual producers to decide whether it was in their commercial interest to have their rams genotyped. The semen archive was completed in March 2008, so any future costs should be relatively minor as they would relate only to storage and maintenance. This is especially the case if the size of the archive is reduced and it is stored in one place.

1.5 Who will be affected

1.5.1 The measures announced will affect a range of non-Government stakeholders, particularly the livestock sector, red meat abattoirs, cutting plants, the animal by-products industry in its widest sense and laboratories that wish to offer a TSE testing or genotyping service. The impact on each is discussed further in section 2 and in the competition assessment in section 7.

Livestock sector

The overwhelming majority of primary livestock producers are *micro businesses*⁶. The changes outlined are likely to impose additional costs on livestock farms in proportion to the number of animals they keep, so we would not expect the impact to affect disproportionately any particular size of farm. However, we have looked carefully at the position of the smallest farms and addressed below at section 5 the issues that arise for those particular businesses.

Abattoirs

The majority of abattoir businesses are *micro or small*⁶. Larger businesses will be able to achieve economies of scale not available to micro and small businesses. All abattoirs currently pay MHS hygiene charges, and any change in the way in which the charge is calculated will have an effect. However, all abattoirs are free to choose whether or not they wish to process OTM cattle and thus to incur the cost of taking and testing a brainstem sample and any MHS charges related to the processing of OTM cattle. We have looked carefully at the position of the smallest abattoirs and addressed below at section 5 the issues that arise for those particular businesses.

Cutting plants

Cutting plants that process OTM cattle containing vertebral column will be affected by plans to charge for SRM controls. Currently, around 100 cutting plants in GB process these cattle. Again, this is a matter of commercial choice. Cutting plants vary widely in size. Many are linked directly to an abattoir and are on the same site.

Animal By-products industry

Changes to the way in which fallen adult cattle are currently treated will have significant implications for the animal by-products industry. Currently, 11 disposal sites in GB hold contracts with the Rural Payments Agency (RPA) for the collection, sampling and disposal of some 230,000 adult cattle per year. The rendering, incineration and knacker industries, hunt kennels and the National Fallen Stock Company (NFSCo) are all directly involved in the collection and disposal of fallen stock. There is also a wide range of downstream industries such as tanneries etc. Businesses within this sector range from the micro to the large scale.

Laboratories

In GB, BSE testing of cattle sold for human consumption is currently carried out by one private company at three laboratory sites (two in England and one in Scotland). Genotyping of sheep is carried out by one private company on one site in England. Both private companies and any other laboratories wishing to offer BSE testing or genotyping service will be directly affected by these changes.

1.5.2 In addition to the industry stakeholders described above, a range of Government stakeholders are involved in the TSE programme:

⁶ Micro businesses are those with 0-9 employees; small businesses are defined as having 0-49 employees (source: Small Business Service)

- Colleagues elsewhere in Defra (particularly the Food and Farming Group) advising Government Ministers on farming-related issues, including animal health and welfare;
- Animal Health (formerly the State Veterinary Service) – an executive agency of Defra, mainly responsible for ensuring that farmed animals are healthy, disease-free and well looked after but also responsible for running the sheep genotyping programme and for approving animal by-products premises as TSE sampling sites;
- British Cattle Movement Service - part of the Rural Payments Agency, overseen by Defra. It maintains a register of births, deaths and imports of cattle to be used for animal health and subsidy control purposes, issues cattle passports, and records where individual cattle are;
- Meat Hygiene Service – an executive agency of the Food Standards Agency. Responsible for protecting public health and animal health and welfare in Great Britain, by enforcing legislation in approved fresh meat premises.
- Veterinary Laboratories Agency - provides services including research, consultancy, diagnosis and surveillance on livestock diseases to Government and commercial customers, carries out BSE tests on fallen cattle and approves laboratories testing for BSE.
- Local Authorities - help to enforce rules on food businesses, farmed animal health and welfare, with powers of inspection, entry, seizure, service of improvement notices, and prosecution.
- Rural Payments Agency – an executive agency of Defra, responsible for inspection under the cross-compliance rules that govern the receipt of the Single Farm Payment and for contracts for the collection, sampling and disposal of all adult fallen cattle and a sample of adult sheep that are required for TSE testing under EU rules.
- Meat and Livestock Commercial Services Unit – Contracted through the RPA's Integrated Livestock Disposal Contract to supervise brain stem sampling from fallen cattle aged over 24 months.

2. Impact of proposals

2.1 Distribution of additional costs across industry

2.1.1 For those measures where the cost will be shared by livestock producers and abattoirs (e.g. analysis of BSE samples taken from OTM cattle entering the food chain, laboratory approvals and MHS charges) it is expected that the cost will be passed in full to abattoirs who in turn are likely to pass at least a proportion of the cost to livestock producers. FSA and Defra economists have made a working assumption that one third of the additional cost would be absorbed by abattoirs, leaving two-thirds to be passed down the chain to livestock producers. The scope for passing some element of additional costs as price increases to consumers is discussed in detail in the competition assessment in section 7 and summarised at paragraph 2.4.2 below.

2.2 Efficiencies to be gained

2.2.1 For the purpose of this document we have assumed that for most of the controls the costs will simply be a straight transfer from Government to industry. However in reality industry are likely to be able to seek out lower cost solutions that are less available to Government. We will not be able to quantify the full extent of efficiencies to be gained until after the work has transferred, but we would expect the following issues to influence costs:

- **Responsibility for analysis of brainstem samples** – if the FSA Board and Health Ministers approve the proposal to increase from 30 months to 48 months the age at which cattle slaughtered for human consumption must be tested for BSE then the number of animals requiring a test is expected to reduce by 86,625 animals. Although not an efficiency savings in the strictest sense, this change has the potential to reduce industry costs significantly. Assuming an average net cost of £11 per sample, this could result in a reduction in the cost to industry of about £1m. Industry will also save the costs associated with taking samples etc in abattoirs.
The level of competition between laboratories is likely to have a significant effect on the price charged to abattoirs. A conservative estimate of a 1% reduction in testing cost on the

reduced number of cattle requiring a BSE test (260,000 cattle) would result in an overall saving to industry of about £0.03m.

- **Charging laboratories for approval to carry out BSE testing** – Four laboratories operated by one company will not be charged for initial approval. Additional private laboratories are expected to seek approval. This is likely to exert downward pressure on the costs to abattoirs of BSE tests. Abattoirs may also benefit from reduced transport costs if a new laboratory is approved close by.
- **Meat Hygiene Service charges** - Defra will not now seek to recover £2.4m as a contribution towards the costs of the MHS as originally proposed. The Food Standards Agency is preparing to consult later this year on a new time-based charging system and on beginning to charge for SRM controls. Defra intend to use the charging system for routine SRM controls to recover a similar proportion of costs directly related to BSE tests. This is expected to result in charges of about £0.126m in England in 2009/10. This figure is expected to increase annually by the same amount.
In the interim, Defra, FSA, MHS and industry will continue to work to improve MHS efficiencies. FSA have set up an Advisory Body including Government and industry stakeholders to advise on the delivery of official controls in meat plants. An 'Optimisation Project' has suggested specific changes to controls and levels of supervision. These initiatives are being taken forward rapidly and regular reports are provided in MHS updates. MHS have achieved considerable savings to date including, for example, by dispensing with regional offices. Some MHS efficiencies will depend on changes in industry practices.
- Responsibility for **collection and disposal of adult fallen cattle** – at present, about 140,000 fallen cattle are collected, sampled and disposed of at an average cost per animal of about £150. When producers are responsible for collection and disposal, they will have an added incentive to send animals into the food chain before they become unfit to transport, succumb to diseases of older age or die. This would reduce the overall number of cattle disposed of as fallen stock. Producers will also be free to make their own arrangements for sending cattle to approved sampling sites. At present, only 11 disposal sites in GB are contracted by Government to manage this work. Additional animal by-products businesses will become involved when the market is opened up. This should increase competition and allow producers to negotiate cheaper prices than Government. The extent of any reduction in numbers of fallen cattle or any reduction in the costs of disposal is impossible to quantify at this stage but if farmers were able to put just 1% more cattle into the market, this would result in an efficiency savings of £0.2m and if collection costs reduced 1% a further £0.2m saving would be realised.
- If the age at which fallen cattle need to be tested for BSE increases from 24 to 48 months, some 35,000 cattle will not need to be tested. It may be possible for producers to dispose of these carcasses at a lower cost, for example, hides could be recovered without the complications associated with awaiting test results. The taxpayer would also save the costs of sampling and analysis.
- The cost of administering the **Ram Genotyping Scheme** will reduce from £0.83m currently to zero when the scheme closes in March 09. Producers who wish to have their sheep genotyped will still be able to do so, but at their own expense using commercial services. This is likely to involve a more streamlined approach, which would not, for example, involve Animal Health visiting farms.
- Collections for the **semen archive** have now been completed and future costs will relate only to storage and maintenance. The new owners are expected to rationalise the archive (using funding provided by Defra) to help reduce storage costs further. They will also be able to explore less expensive storage options and the overall annual cost of the archive is expected to reduce from the current cost to Government of about £75,000 to about £20,000
- The current cost to Defra of operating the Scrapie Monitoring Scheme in GB is about £100,000 per annum. This involves staff in all Animal Health Divisional Offices and staff in Defra HQ. SAC will make significant changes to simplify the procedures for application and approval and also streamline and centralise administration of the scheme by combining it with the administration of their Premium Sheep and Goat Health Scheme in one office. In addition to this, some functions currently carried out by Defra will be carried out by official veterinarians (OVs); scheme members will pay OVs for doing this work. SAC estimate that their costs to administer the scheme will be in the region of £16,500 based on a membership of 350.

2.3 Benefits to taxpayers

2.3.1 The application of the “beneficiary pays” principle would lead to a reduction in the burden on taxpayers, with savings to the exchequer from the Defra proposals currently estimated at around **£26.48m** per annum in England by 2010/11, and rising by £0.126m per year thereafter. These savings are based on the difference in the cost, to taxpayers in 2010/11, of maintaining the current arrangements and transferring responsibility for the various activities to industry as proposed. This needs to be viewed in the context of the Government’s total current expenditure of about £400m on animal health and welfare in GB. Further savings to taxpayers will arise from FSA proposals to charge more for MHS costs currently funded by FSA.

2.3.2 Over the past two financial years we have delivered efficiency savings within the proposed cost sharing areas of some £18m in England against baseline Defra budgets. As outlined at section 2.2 there are likely to be further efficiencies when costs are shared with industry, therefore the savings to taxpayer are expected to exceed the costs to industry.

2.4 Costs to stakeholders – livestock producers

2.4.1 Livestock producers are likely to incur the bulk of the costs associated with these proposals, as they are the main beneficiary of the current arrangements. For those measures where the cost is likely to be shared between farmers and the abattoir sector we have made a working assumption that slaughterhouses will absorb approximately 1/3 of the cost and farmers the remaining 2/3. Other costs, for example, collection and disposal of fallen cattle aged over 24 months, will fall in full to farmers. However there are steps farmers could take to reduce the current number of adult fallen cattle e.g. by treating those that are lame or culling cattle earlier so that those that are born after July 1996 are still fit to be transported and are healthy and can be sold for human consumption. As outlined in table 1, the cost to farmers is likely to be as follows:

- For the analysis of BSE samples taken from OTM cattle entering the food chain, assuming an average net cost of £11 per sample (2/3 of which is passed to the farmer) the total cost to industry in England is forecast to be in the region of £3.8m of which approximately £2.5m is likely to be passed to farmers.
- The total industry cost of laboratory approvals is forecast to be £0.12m for initial approvals and £0.08m annual charges and it is assumed that farmers will incur approximately £0.08m and £0.05m of these charges respectively.
- For MHS enforcement of BSE testing controls, the total cost to industry in England is forecast at £0.126m in 2009/10, increasing by a further £0.126m each subsequent year. Farmers might be expected to pay around two thirds, or £0.08m of this in the first year (rising each subsequent year).
- For collection and disposal of over 24 month old fallen cattle - farmers will pay the full estimated £21.4m cost to the industry in England.

2.4.2 As part of its Farm Regulation and Charging Strategy, Defra has designed a methodology to consider the likely economic impact of future regulation on the farming industry. We have used this methodology to provide estimates of the likely impact of the cost sharing proposals on farm costs and net profit for farms in England, using data from the Farm Business Survey.

Notes on economic analysis: assumptions and sensitivities

The figures in this analysis are best estimates based on the information currently available.

The analyses of the distribution of additional costs across the supply chain are based on our understanding of the structure of the livestock sector and of the meat and livestock products supply chain.

We have generally assumed that farmers have little scope for passing on increased production costs to consumers, and that they eventually also bear a high proportion of any additional costs imposed on abattoirs.

The demand for meat products (other than sheepmeat) is not very responsive to price changes (i.e. it is inelastic), appearing to suggest some scope for passing on cost increases in the form of higher prices. However, as the supply of these products is also fairly unresponsive to price movements (i.e. is inelastic), at least in the short to medium term, the scope for passing cost increases on to consumers is reduced. An additional factor restricting the scope for producers to pass on cost increases will be the ease with which supplies can be imported. In the case of niche market products, for example premium branded beef, producers may have greater opportunity to pass on increased costs in the form of higher prices but such exceptions are likely to be limited.

In all sectors, average incomes at the farm level show substantial fluctuations between years: movements over the past 20 years are substantially greater than the estimated impact of all known new farm regulations over the next 10 years. Factors such as exchange rates, input prices, output levels and prices, disease outbreaks, and CAP reform have had a much bigger effect on farm incomes than have regulatory costs.⁷

2.4.3 Table 2 below, derived from the methodology referred to in paragraph 2.4.2, shows the average cost of the new measures for the main English farm types affected. These additional costs (based on 2006/07 survey data) are shown in the context of average farm costs from 2004/05 to 2006/07 and average Farm Business Income for the same years. Note that figures shown are averages: there will be variations of costs and profits at the farm level. Analysis of the impact on livestock producers of these proposals is discussed in the competition assessment at section 7.

Table 2: Average cost of Defra BSE cost sharing proposals by farm type

	Average annual cost of proposals to farms	3-year average annual farm costs	3-year average annual farm business income	Proposal costs as % of 3 year average annual total costs	Proposal costs as % of 3 year average annual farm business income
Dairy	£1,310	£145,200	£34,500	0.9%	3.8%
Lowland Grazing Livestock	£280	£51,200	£11,300	0.6%	2.5%
Mixed	£510	£149,600	£28,200	0.3%	1.8%
LFA Grazing Livestock	£240	£50,200	£14,300	0.5%	1.7%

2.4.4 The impact of these proposals on costs and profits needs to be seen in the context of the cumulative impact of all major regulatory proposals, for example the diffuse pollution measures and nitrates controls.

2.4.5 In particular, in addition to the costs in tables 1 and 2, the Board of the FSA in July 2008 again considered various aspects of the delivery of official controls in approved meat premises (abattoirs, cutting plants and game handling establishments) both in terms of reducing costs and in relation to MHS charges. Following a public consultation, the FSA agreed to increase hygiene throughput rates by more than inflation from April 2008. The Board also requested the development, in consultation with stakeholders, of a new charging system for introduction in 2009/10 that would:

- reflect the intended new arrangements for delivering Official Controls;
- allow a progressive move towards full cost recovery;
- introduce appropriate charges for SRM controls;

⁷ Partners for Success: a Farm Regulation and Charging Strategy, Defra (2005), p.16.

- permit the more effective targeting of any subsidy;
- provide financial incentives to food business operators to comply and to make efficient use of MHS services.

2.4.6 The additional impact on farms of the FSA proposals would be to add around 0.01% onto average farm costs in 2009/10: this would consume around 0.2% of average profits on grazing livestock farms, 0.1% of mixed farm profits, and 0.1% of dairy profits. The impact of these proposals would be felt on farms with other livestock as well as cattle. We will continue to work with the FSA and across Defra to ensure that analysis informs decisions across the range of proposals.

2.5 Costs to stakeholders – slaughterhouses

2.5.1 Many factors will influence the extent to which abattoirs will be able to pass on a charge to their customers or pass it back to their suppliers. The level of competition between abattoirs, raw material suppliers and distributors will be among the factors affecting this. We have made the working assumption that slaughterhouses will absorb approximately 1/3 of the additional costs charged to them and pass the remaining 2/3 to farmers. As outlined in table 1 this is expected to result in the following costs to abattoirs:

- For the analysis of BSE samples taken from OTM cattle entering the food chain, £4 of the forecast average net £11 per sample is expected to be absorbed by abattoirs resulting in a cost to the sector in England of some £1.3m per annum
- Laboratory approvals are forecast to be £0.12m for initial approvals and £0.08m annual charges and it is assumed that abattoirs will pay approximately £0.04m and £0.03m of these charges respectively.
- For MHS enforcement of BSE testing controls, the total cost to English industry as a whole is forecast to be £0.126m in 2009/10, increasing by a further £0.126m each subsequent year. Around a third, or £0.04m, rising by a further £0.04m each year, is expected to be absorbed by the abattoir sector.

2.5.2 Larger businesses will be able to achieve economies of scale, for example, where they transport a single load with a large number of samples thereby spreading the cost thinly across the business compared with micro or small abattoirs who are dealing with smaller numbers. Similarly larger abattoirs may be better able to spread MHS costs with some of the largest businesses slaughtering up to 400 OTM cattle per day whereas smaller abattoirs may slaughter only a handful of OTM cattle per day.

2.5.3 If the cost of these charges is relatively higher per head for smaller slaughterhouses then their lower throughput may be reduced further. The position of low throughput abattoirs will therefore need to be carefully considered so that any time-based charging system for MHS costs does not cause a disproportionate number to close. However, all abattoirs are free to choose whether or not they wish to process OTM cattle and thus to incur the cost of taking and testing a brainstem sample and any MHS charges related to the processing of OTM cattle.

2.5.4 On the supply side, the supply of animals to local abattoirs may be reduced from marginal or small livestock keepers, who could be relatively more adversely affected by the costs passed to them than larger producers. This would tend to reinforce these abattoirs' diminishing throughput, possibly leading to unprofitability. At the risk of over-simplifying, if a charge is imposed on output that is non-specialised or generic, it will tend over time to be borne by producers despite the actual point of imposition, whereas if imposed on specialist products then to the extent that they can be differentiated, it will tend to fall on customers.

2.6 Costs to stakeholders –laboratories

2.6.1 The only private laboratory in GB currently to genotype sheep on one site will be affected by the ending of the RGS. It is likely that some producers will use this laboratory (and possibly one or two others) to genotype a reduced number of pedigree breeding sheep. There may also be a slight increase in costs when a smaller amount of work is funded directly by industry rather than Defra.

2.6.2 The only private laboratory in GB currently to carry out BSE tests on two sites in England and one site in Scotland will be affected when industry pays directly for tests and now that VLA charges

annual fees. For new laboratories entering the market the initial VLA charge will be around £0.03m with a further £0.01m annual charge per laboratory (although this will reduce to £0.005m in the second year of operation). However, it is expected that the laboratories will pass this cost, in full, to abattoirs. Whilst significant numbers of cattle require testing the additional burden will be relatively small. New laboratories have expressed interest in entering the market, and, even if the age above which cattle must be tested is increased to 48 months in January 2009, there will still be over 250,000 cattle that require testing in England alone. The laboratory approval charges in table 1 above do not include the cost of infecting and keeping cattle in order to obtain positive brain stems for quality control purposes and we are not proposing to charge for this work at this stage.

2.7 Costs to stakeholders –Animal By-Products industry

2.7.1 When livestock producers resume responsibility for the disposal of their fallen adult cattle, they will tend in the first instance to call upon knackers or their local disposal sites. In some cases these will not be the same collectors sub-contracted by the 11 disposal sites under the RPA contracts. It follows that there are likely to be some winners and losers within the ABP industry immediately following a change in current arrangements. However, it is difficult to assess the impact on individual businesses. Livestock producers will have an additional incentive to become members of the National Fallen Stock Company (NFSCo) who will administer £1.26m of transitional funding to producers in England in the first year following transfer.

3. Administrative burden

3.1.1 The changes in delivery of the controls are not expected to have any significant overall net affect on the administrative burden of industry. Those areas where there may be a slight change in the burden (either a positive or negative adjustment) are shown below. For all other areas the affect is expected to be neutral.

Burden on farmers

3.1.2 The process of arranging the collection and disposal of fallen cattle aged over 24 months will be much the same as at present but farmers would ring a knacker or hunt kennel rather than the RPA's TSE Surveillance Helpline to arrange collection of their animals (or delivery if doing this themselves). There would be a small administrative burden on farmers from having to process and pay a fee where currently fallen cattle aged over 24 months are collected free of charge by the RPA.

3.1.3 The sheep sector will benefit from a reduction in the administrative burden resulting from the ending of the Ram Genotyping Scheme and simplifying the SMS.

Burden on laboratories

3.1.4 At present the laboratory carrying out analysis of BSE samples taken from OTM cattle entering the food chain submits a single monthly invoice to Defra for testing costs. The laboratory also charges all abattoirs processing OTM cattle for sample packaging, pots etc. There are currently about 55 English abattoirs approved to process OTM cattle (appendix 2 has further details on the structure of the livestock and abattoir industry). Under these cost sharing proposals laboratories would need to charge each OTM abattoir for all related testing and packaging costs. As the laboratory currently contracted already has an infrastructure in place for charging OTM abattoirs, there will be only a small additional administrative burden on it as a result of these proposals. However new laboratories would need to put in place an appropriate charging system. It is likely that they will take account of any additional burden in their prices to abattoirs.

3.1.5 As all testing laboratories will be expected to be ISO17025 compliant, the administrative effort in achieving this standard will have prepared the ground for official approval for testing. A laboratory that is already compliant will have a minimum of additional input in preparing an application, estimated at 2 man-days, together with another day for laboratory inspection. A laboratory that is not already ISO compliant will have significant administrative effort that is in part dependent on the nature of the laboratory's existing objectives.

3.1.6 The additional administrative burden arising from compliance with annual workshops is partly dependent on company needs. The workshop is expected to take up 2 days but may require some preparatory work. This should not be seen as entirely an administrative burden however as the laboratory also benefits from participation.

Burden on abattoirs

3.1.7 Abattoirs already have a relatively heavy burden in ensuring compliance with BSE controls. Following transfer of responsibility for analysis of brainstem samples from OTM cattle entering the food chain, the only additional administrative burden envisaged would be the processing and payment of invoices received from laboratories. However as explained above, abattoirs are already invoiced for sample packaging etc by the laboratory currently carrying out BSE testing so there would be no significant additional administrative burden.

4. Developing policy in partnership with stakeholders

4.1.1 From the start, the Responsibility and Cost Sharing Programme has engaged actively with industry and wider stakeholder groups, first through the Joint Industry/Government Working Group, then through the UK-wide Industry Consultative Forum (comprising senior leaders of the main UK farming unions and officials of the UK Agriculture Departments). We have also involved the England Implementation Group for the Animal Health and Welfare Strategy, and held a series of meetings with a wide range of individual sectoral stakeholder groups.

4.1.2 In addition, we held a public consultation in December 2006 on the principles underlying responsibility and cost sharing for animal health and welfare, and sector-specific workshops. These principles are, in effect, criteria for how we take policies forward.

4.1.3 A further public consultation followed in December 2007, which included proposals to cost share the seven TSE measures set out in this Impact Assessment. Since then, we have worked closely with stakeholders on each of the TSE cost sharing proposals to agree objectives and to ensure that they are achieved in a way that takes account of practical considerations and achieves an appropriate balance of costs and responsibilities between the industry in its widest sense and the taxpayer.

4.1.4 The sheep and goat industry have had regular meetings with officials and had previously been considering the future of the Ram Genotyping Scheme and the Semen Archive. Members of the Scrapie Monitoring Scheme have also been consulted about its future.

4.1.5 We have held a series of meetings with producer representatives, the animal by-products industry, NFSCo, RPA and VLA to discuss TSE surveillance of fallen cattle, to take account of their views and to develop a re-organised fallen stock surveillance programme.

4.1.6 We will continue to work closely with FSA and MHS on recouping MHS costs currently funded by Defra because we recognise the need to ensure that there is harmony between our plans and the FSA's similar objectives. Both FSA and MHS are members of TSE cost sharing project board. MHS has been asked by FSA to develop a time based charging system and a system for beginning to charge for SRM controls to be implemented in 2009. We will link into those systems. There are regular meetings with FSA, MHS, Defra, the Devolved Administrations and the livestock and abattoir industries on MHS transformation and charging.

4.1.7 The laboratory contract for BSE tests on OTM cattle slaughtered for human consumption, which was awarded, after a tender exercise, early in 2007 included a requirement that the laboratory should be able to charge abattoirs direct for samples submitted. We will work closely with the laboratory, abattoirs and the MHS to ensure that any transition with the current laboratory or any other laboratory takes place smoothly. Similarly, VLA will continue to work closely with laboratories to ensure that necessary standards are met and procedures are transparent.

4.1.8 Finally, we are working with stakeholders to ensure that if it is agreed by the EU that the UK can raise the BSE testing age for cattle to 48 months, the age changes can be implemented as soon as possible for both cattle slaughtered for human consumption and fallen cattle (see section 1.4.4

above). A joint consultation with FSA on raising testing ages was issued on 31 October 2008. If in future only a sample of cattle has to be tested, there would be further savings. However, the benefits would then arise to the industry as a whole, rather than individuals and it might become appropriate to secure funding through a levy or some other fund raising mechanism.

5. Specific Impact Tests

5.1 Small Firms Impact Test

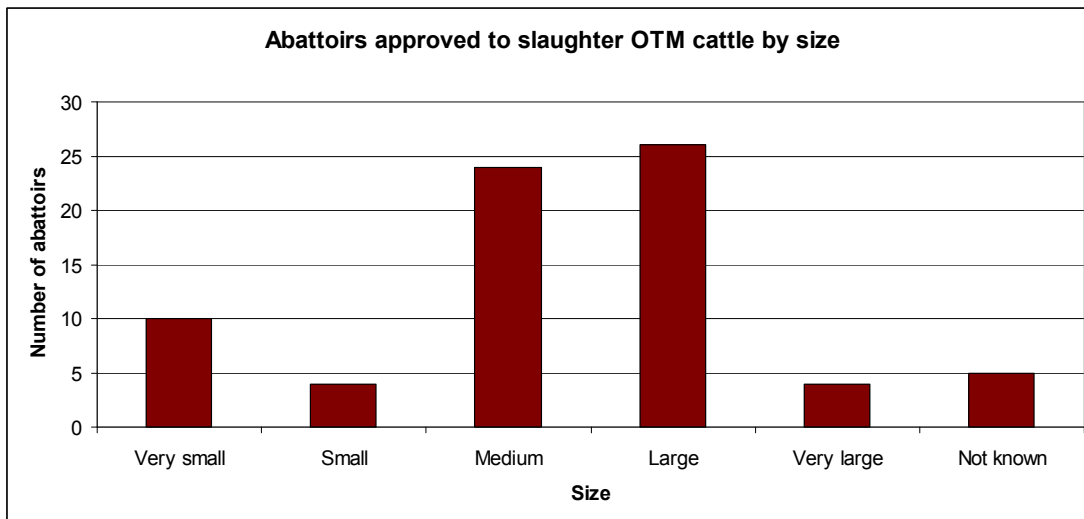
Livestock producers

5.1.1 The overwhelming majority of livestock producers are *micro businesses*⁸. Within the farming industry, there are differences in farm size, but these proposals will generally affect primary producers in direct proportion to the number of cattle that they keep. The proportion of OTM cattle per holding and the percentage of cattle that die or are killed on farm other than for human consumption are broadly unaffected by the size of the holding. However, farmers with smaller holdings may tend to keep their cattle for rather longer than large-scale enterprises. As a result they may have a slightly higher percentage of OTM cattle and a slightly higher percentage of fallen cattle aged over 24 months. Nevertheless, we would expect any differences relating to the size of the enterprise to be marginal.

Abattoirs

5.1.2 Abattoirs processing OTM cattle range from a few large businesses employing 250 or more people where there is a linked cutting plant to some 20 micro businesses employing fewer than 10 people. There are a range of small and medium businesses in between. In the year ending 31 July 2007, 10 abattoirs slaughtered between 14,000 and 49,000 OTM cattle (61 per cent of the total of 432,883 OTM cattle slaughtered in GB in this period). In the same period, 26 abattoirs slaughtered fewer than 750 cattle, (1 per cent of the total OTM cattle slaughtered). MLC data based on figures from November 2005 to April 2007 show that a number of very small and small abattoirs are involved in the slaughter of OTM cattle, see Table 3 below.

Table 3 – Approved GB abattoirs by size (a)



Source: MLC data

(a) Sizes defined using MLC size ranges: very small <1,000 ELU, small 1,000 – 5,000 ELU, medium 5,000 – 30,000 ELU, large 30,000 – 100,000 ELU, very large >100,000 ELU (ELU = EU defined livestock unit)

5.1.3 Where costs are charged per animal, as may generally occur for analysis of brainstem samples, small abattoirs would not be adversely affected. Similarly, small abattoirs should not be disproportionately affected by plans to charge for laboratory approvals because these in turn would be

⁸ Micro businesses are those with 0-9 employees; small businesses are defined as having 0-49 employees (source: Small Business Service).

reflected pro-rata in the charge per sample for laboratory analysis. Whilst larger abattoirs might receive a discount for bulk supply of samples (this would be a commercial decision for laboratories) overall, the cost of analysing samples and approving laboratories would not be expected to have a significantly disproportionate effect on small businesses. However, as with all costs, whilst an individual price increase may have a minimal impact, the cumulative effect of a number of small increased charges could be significant. As above, we have estimated that two thirds of any increased costs applied to abattoirs would be passed down to producers

5.1.4 The cost of MHS enforcement is different in that it is significantly higher per livestock unit in micro abattoirs with a low throughput than in larger abattoirs with higher throughputs. In developing a time-based charging system that could be used to recover costs currently funded by both FSA and Defra, the MHS will have regard to the future financial viability of small meat plants and is involving industry stakeholders. EU law also requires member states to take into consideration the interests of businesses with a low throughput when setting charging rates. This is 'work in progress' and until it has advanced further, it is not possible to determine the effect on the smallest plants. FSA are expected to consult on the MHS charging system in December 08 taking account of increased EU minimum through-put charges (+18% for cattle) which come into effect on 1 Jan 2009.

5.1.5 Ultimately, very small abattoirs will need to take a commercial decision as to whether to continue to process OTM cattle. If they chose not to do so, they would not be affected by these changes. However, they might find that farmers who went elsewhere to slaughter their cattle aged over 30 months then chose to send their cattle aged under 30 months to the same abattoir. The smallest abattoirs also often supply the local service and retail sector (including local pubs and farm shops). If local abattoirs ceased to trade, this could affect the local economy. However, OTM cattle are likely to make up a relatively small proportion of the total kill of the smallest abattoirs.

ABP industry

5.1.6 Farmers may make more use of small local knackers to dispose of fallen cattle aged over 24 months when the current arrangements by which collection is organised by 11 large disposal sites are changed. In this respect, it is possible that smaller firms may benefit from the new arrangements that will come into effect on 12 January 2009.

5.2 Legal Aid

5.2.1 The TSE England Regulations are being amended to include three new offences relating to adult fallen cattle. However, the new arrangements very much parallel existing obligations placed on producers and ABP collectors and we would not expect there to be any significant increase in demand for legal aid. The new offences are as follows:

- For a farmer/person in possession of an adult bovine requiring a BSE test not "arranging for delivery" or identifying a sampling site to take delivery of the carcass, within 24 hours of death.
- For a person collecting the carcass and not delivering it to a sampling site within 48 hours.
- For destruction of the carcass without taking a brain stem sample (sampling).

5.3 Carbon Impact Assessment and other environmental issues

5.3.1 It is not possible at this stage to estimate what impact – if any – these proposals may have on a fuller range of relevant environmental indicators, such as emission of greenhouse gases or water quality. Reducing the sheep breeding programme could reduce the number of visits to farms. Currently fallen cattle travel long distances to 11 disposal sites in GB and abattoir samples travel to 3 laboratory sites. However, there is only a finite number of large-scale disposal sites and the number of BSE testing laboratories may not increase significantly. Industry would need to balance economies of scale against transport costs. Removal of a free collection and disposal service for fallen adult cattle is likely to result in a small increase in the number of cattle that are disposed of illegally. This could result in smells, nuisance and water pollution.

5.3.2 Changes in livestock numbers and in the appearance of the landscape, and any effects on habitat or wildlife, are impossible to determine. However, these proposals alone are unlikely to bring about significant changes in livestock numbers.

5.4 Health Impact Assessment

5.4.1 These proposals will not directly impact on health and wellbeing and will not result in health inequalities.

5.5 Race/Disability/Gender/Age

5.5.1 These proposals do not impose any restriction or contain any requirements which a person of a particular racial background, disability or gender would find more difficult to meet. Conditions apply equally to all individuals and businesses involved in the activities covered by the proposals.

5.5.2 We have not been able to determine with any degree of certainty whether the cost sharing proposals would have a differential impact on older people. Our statistics on the age structure of the farming industry in the UK suggest that the average age of farmers is 58. In 2005, 29% of farmers were over 65, with another 29% between 55 and 64 years old.⁹ There is therefore an in-built risk of the proposed policy having an impact on the income of older farmers, but there is no intrinsic reason why this impact should differ from the impact on younger farmers.

5.6 Human Rights

5.6.1 These proposals are consistent with the Human Rights Act 1998

5.7 Rural Proofing

5.7.1 These proposals affect livestock producers and businesses, which (with the exception of laboratories) are generally based in the countryside. Economic profitability alone has not in the past been a reliable predictor of exits from the livestock industry¹⁰. Even if it were, two more elements would make it hard to examine the effects of cost sharing in isolation:

- there is no method for separating the effects of cost sharing from the effect of any other major regulatory proposal that might be having an impact in the same time period; and
- Regulatory costs are only a small driver for most sectors, and it would be difficult to disentangle their effects from much wider non-regulatory factors.¹¹

5.7.2 Rural employment would be affected if rural abattoirs with close links to local farmers and butchers were to close. Local knackers could pick up more business now that farmers will be free to choose how to dispose of fallen cattle aged over 24 months.

5.8 Unintended consequences

5.8.1 There is likely to be some increase in the illegal disposal of fallen cattle aged over 24 months now that responsibility for disposal is being passed back to farmers, but it is impossible to quantify. Illegal disposal may be deterred by the current cross checking of cattle reported as dead against those that have been tested, backed up by cattle identification inspections which are carried out on some 10 per cent of farms each year. Failure to report deaths may lead to prosecution under cattle identification legislation and may affect single farm payments, which means that there is a clear incentive to comply with legal requirements.

5.9 Enforcement/compliance costs

5.9.1 Enforcement/compliance costs in abattoirs and laboratories for BSE testing of OTM cattle will not change as a result of these proposals. There are also no implications for the semen archive or the

⁹ Agriculture in the UK (2006): p.22. Note that the age recorded here is that of the person in whose name the farm holding is operated, irrespective of whether or not they are also the manager of the holding.

¹⁰ Agriculture and the Economics of Regulation, Defra, (2005): p.20

¹¹ A Study of the Long-Term Trends affecting the Farming Industry, EFPF (2005)

SMS, which are voluntary schemes, and the RGS will end in March 2009. Enforcement/compliance costs for the disposal of adult fallen cattle in line with the Animal By-products Regulation - particularly the on-farm burial ban - may increase because the ending of the current free collection and disposal service may result in some additional illegal disposals and consequently, some additional enforcement activity for Local Authorities. The £1.26m transitional funding provided by Defra may help to mitigate this. However, as in paragraph 5.8.1 above, the level of potential non-compliance and therefore enforcement action required is impossible to quantify. Compliance with the burial ban for cattle aged under 24 months is considered to be high. Compliance costs to farmers will increase as identified in Table 1 and 2.3.1 above.

6. Implementation and evaluation

6.1 Implementation

6.1.1 The timetable is set out in Table 4 below.

Table 4: Timetable for implementing TSE cost sharing measures

Cost sharing measure	Implementation
Charging for approval of laboratories wishing to carry out BSE tests	30 Sept 2008
Transferring the semen archive to NSA/RBST	Dec 2008
Transferring administration of a Scrapie Monitoring Scheme to SAC	1 Jan 2009
Transferring to abattoirs responsibility for analysis of BSE samples taken from OTM cattle entering the food chain	1 Jan 2009
Transferring to producers responsibility for the collection and disposal costs associated with over 24month old fallen cattle requiring a BSE test	12 Jan 2009 (1 Jan 2009 for cattle aged 24 – 48 months if testing age increases to 48 months on 1 January 2009)
Closure of the RGS	31 March 2009
Charging for MHS enforcement of BSE testing controls	2009/2010

6.2 Evaluation

6.2.1 Cost sharing measures will be reviewed one year after implementation. The reviews will evaluate performance against two key considerations:

- The impact that cost sharing proposals have had on the industry as a whole; and
- The effect, or otherwise, that cost sharing has had on the integrity of the TSE controls.

6.2.2 Success criteria will need to be developed with stakeholders as this work progresses. In terms of the impact on the industry as a whole, this is likely to focus on:

- The extent to which fallen cattle are disposed of legally and in an environmentally friendly way. We might measure this by getting feedback from Local Authorities on changes in the level of compliance with controls, including the fallen stock burial ban.
- General feedback from industry about the BSE testing programme: the programme should be run with minimum bureaucracy, inconvenience and expense to industry and minimum cost to the taxpayer (bearing in mind the division of responsibilities and costs agreed

following this consultation). We would also assess whether farmers have been able to access suitable abattoirs.

- Financial impacts on the industry – for example through looking at changes in cull cow prices.

6.2.3 It should be noted that the outcome of any evaluation against these success criteria may not necessarily be a direct result of these proposals alone and it will be difficult to separate the effect of cost sharing from other factors. Furthermore, the level of compliance will be difficult to quantify.

6.2.4 In evaluating the integrity of the controls, we will consider whether:

- EU requirements have been met in full i.e. brain stem samples have been taken from all cattle legally required to be tested and these samples have been tested as required
- there has been any deterioration in sample quality or if the quality of samples has improved

6.2.5 The testing programme in England will continue to be subject to regular audits. Currently the Meat and Livestock Commercial Services Unit, RPA, MHS, VLA, Defra, FSA and the EU's Food and Veterinary Office carry out audits on various parts of the programme. We will use the results of these regular audits to evaluate any changes in the current arrangements.

7. Competition Assessment

7.0.1 To assess whether or not the current proposals on cost sharing could have competition implications - and if so to what extent – we have looked at the basic characteristics of the key sectors involved.

7.1 Livestock Producers

7.1.1 In 2005, UK livestock production represented a relatively small proportion (i.e. <10 %) of EU output, apart from sheep-meat and chicken meat. The UK produces 27 per cent of the sheep-meat produced in the EU, nearly 9 per cent of EU bovine meat and nearly 10 per cent of EU milk.

7.1.2 Looking at consumption, the National Food Survey (2000), although not very recent, gives some indication of the direct demand elasticities for each of the prices of the various meats and other animal products on that particular product. These elasticities represent estimates of the percentage change in the consumer demand for a product that will result from a 1 per cent change in its own retail price (i.e. an own price elasticity of -1 implies that a 1 per cent price increase will reduce demand by 1 per cent also). Note also that these elasticities are determined with respect to the generic meat categories. One might expect that elasticity values for more specific sub-categories, e.g. from particular sources, would be higher (in absolute terms).

Own price* elasticities for meat and animal products

Product	Own price Demand Elasticity (1988-2000)
Beef and veal	-0.45
Mutton and lamb	-1.29
Milk and cream	-0.36

* for explanation please see paragraph 2.4.2

7.1.3 With the exception of mutton and lamb, consumer demand for livestock products is moderately inelastic, i.e. demand is only moderately responsive to price changes. Mutton and lamb is more elastic than other meats and related products, whilst milk is highly inelastic. These moderately low demand elasticity values for meats should be viewed in the context of generally fairly low supply elasticities for some of these products^{12 and 13}. This would tend to mitigate any scope that might potentially arise from the demand elasticities, taken in abstract, to pass on some element of additional costs as price increases to consumers.

¹² Hallam, D. & Zanoli, R. (1993). Error correction models and agricultural supply response. *European Review of Agricultural Economics*, 20 (2), pp.151-66

¹³ Revell, B. & D. Oglethorpe (2003). *Decoupling and UK Agriculture: a whole farm approach. An appraisal of the impact on the livestock sector*: Harper Adams University (Newport, Shropshire) & Edinburgh: Scottish Agricultural College.

7.1.4 Moreover, the UK market is open to significant competition, particularly from the other EU member states. The narrower the base a charge is imposed on, the less likely it is that producers will be able to pass it on to consumers through higher retail prices. For example, if the changes outlined were imposed only on producers in England, then competition from both Scottish, Welsh and Northern Irish farmers and EU farmers would mean that English producers would be unable to increase their prices. Some industries, such as dairy, are also subject to intense internal competition, which when coupled with the disparity in market power between individual producers and large-scale retail chains, means that producers are unlikely to be able to pass on additional costs despite a low price elasticity of demand for milk. Producers of niche market products however, such as early spring lamb, premium branded beef, etc, may have some scope to pass on increased costs through higher prices.

7.1.5 EU member states differ widely in their cost sharing practices and how their BSE testing programmes are managed. For example, there is a wide variation in the way in which the collection and disposal of fallen stock takes place and the level of state aid provided. Similarly, industry in some Member States such as the Netherlands, already pays for BSE tests for cattle slaughtered for human consumption but practice varies significantly as do the individual laboratory costs. The Netherlands also charge laboratories for approval to carry out BSE tests. Some Member States use only Government laboratories for BSE testing. The charges applied for the enforcement of testing, SRM and hygiene controls also vary widely between Member States and many make special arrangements for small abattoirs.

7.1.6 Overall, because costs for producers are directly related to the number of cattle they own, there should be no significant effect on competition between individuals.

7.2 Red Meat Abattoirs

7.2.1 The number of abattoirs, particularly smaller units, in England may fall over time. There is currently a wide range of abattoir sizes, although most abattoirs are small. For example, 87 per cent of cattle abattoirs slaughtered fewer than 20,000 cattle in 2006 (MLC figures). As smaller abattoirs have to spread their incremental handling costs over a relatively small throughput, they may have to charge farmers more per head than the larger abattoirs that are better placed to minimise some of the handling costs. Therefore, over time, one might expect that there would be a tendency for more farmers to send their livestock to larger abattoirs, thereby reducing the supply of livestock to smaller abattoirs and potentially causing some to leave the industry. This would be in line with the current trend towards industry consolidation (see section 2.5) and may constitute a reinforcement or acceleration of an on-going underlying tendency.

7.2.2 The ruminant livestock population distribution in England is concentrated in the Northern and Western regions – those closest to the borders with Scotland and Wales. For beef cattle, concentrations of more than 10 beef breeding cows per 100 hectares of farmed land are found in Cumbria, Durham and Northumberland, with high concentrations of sheep over 100 per 100 hectares of farmed land) and dairy cattle (more than 20 per 100 hectares of farmed land) being found in the same areas, and extending into the Pennine region, Somerset and Dorset. (MLC)

7.3 Animal by-products (ABP) industry (renderers, incinerator operators, knackers, hunt kennels and NFSCo)

7.3.1 Competition between the various sectors of the ABP industry could be significantly affected by the ending of RPA contracts with 11 disposal sites run by specific renderers and incinerator operators. These businesses currently arrange the collection of fallen adult cattle from farms and the disposal of these carcasses, after brainstem sampling, at their disposal sites. When livestock producers resume responsibility for the disposal of their fallen adult cattle, they will tend in the first instance to call upon knackers or their local disposal sites. In some cases these will not be the same collectors sub-contracted by the disposal sites under the RPA contracts.

7.3.2 Producers who are currently not members of the National Fallen Stock Company (NFSCo) may be more inclined to become members, particularly specialist cattle producers who have largely had a free fallen stock collection service under the RPA contracts (except for relatively inexpensive collection of calves). The £1.26m transitional funding payable through NFSCo for fallen cattle in England requiring BSE tests provides a further incentive. However, if the NFSCo is not able to offer reduced prices compared to those producers may obtain by entering into private arrangements with knackers, then take up could be low.

7.3.3 When disposal sites cannot rely on large-scale contracts with RPA, prices for the disposal of all categories of fallen stock may change but not necessarily downwards. Although there may be increased competition from a larger number of knackers being able to offer a service, ultimately, there are relatively few large-scale disposal sites in England. As a result, they exert strong market dominance and this may mean the price for disposal offered to knackers will not fall and in turn, the knackers may not be able to reduce the prices offered to farmers.

7.4 Laboratories

7.4.1 Currently, Defra contracts a single company (with laboratories on two sites in England and one site in Scotland) to carry out BSE tests on OTM cattle slaughtered for human consumption. When abattoirs are free to send their brainstem samples to any approved laboratory, this will increase competition in this sector. Any laboratory wishing to carry out BSE tests will need to pay for the cost of becoming approved and for maintaining that approval. Other companies wishing to carry out BSE tests will also need to consider how long, and in what form, the testing programme is likely to remain in place. However, several companies already have considerable expertise in this area because they are approved to carry out BSE tests in other EU Member States.

7.5 Competition Assessment summary

There will be competition implications for producers, abattoirs, the ABP industry and laboratories but overall, the trend is likely to be to increase competition. However, the position of low throughput abattoirs will need to be carefully considered so that the new time-based charging system for MHS costs does not cause a disproportionate number to close. This is 'work in progress' and will be subject to further consultation. For all sectors covered by these proposals, the effects may be marginal in comparison to other regulatory changes on the horizon. A lack of available data means that quantitative analysis has not been possible and hence the qualitative conclusions drawn above should be treated with caution.

Specific Impact Tests: Checklist

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

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

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

Appendix 1: Rationale for Government intervention

The current situation

One of the key principles of better regulation is that Government should only intervene where market forces either fail to deliver solutions or cause significant damage. The wide impact animal diseases can have – on human health, the rural economy, international trade, biodiversity, the environment - means that Government has a role to play, but the degree and nature of that intervention needs careful consideration.

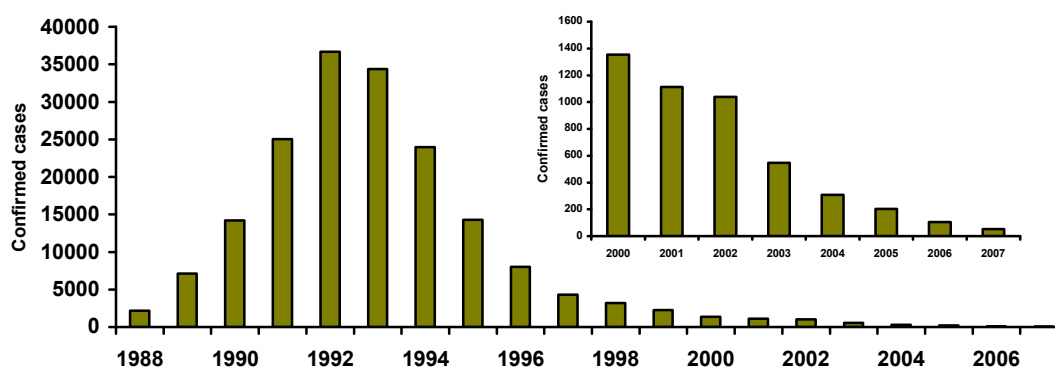
Historically, Government has intervened heavily in animal health and welfare, giving markets little or no role. This has created two types of problems:

- There have been few incentives for individual animal keepers to manage their disease risks actively, and for collective action by the farming industry. In purely economic terms, animal diseases are one of the costs of livestock production (just like feed or a cattle crush). Accordingly, just as livestock producers make decisions on what feed to purchase, they should have the ability to decide on the balance between the level of disease risk they wish to face and the resources they use in disease prevention and control. However, while individual producers benefit from the disease prevention activities that they undertake, such as biosecurity, the return to industry as a whole of limiting the risk of spread of disease may be greater than this individual benefit. As a result, at the farm level, the – real or perceived - cost of better husbandry practices can outweigh the benefits. (The probable link between BSE and variant CJD in humans makes it imperative for both public and animal health reasons to eradicate BSE and the Government needs to be involved, but only to the minimum extent necessary to achieve specified objectives. In the case of BSE, the most likely cause of infection is contaminated feed before reinforced controls came into effect in GB from 1 August 1996. Transmission between animals is not an issue.)
- Regulatory intervention by Government can stifle innovation and the private sector's ability to find its own solutions, which might be more efficient. In addition, the way businesses are treated by Government is not consistently influenced by the level of risk they pose. In other words, businesses with excellent biosecurity records are not rewarded for their high standards, for example through lower inspection rates or greater autonomy.

The direct costs to Government in implementing controls on BSE and scrapie have been very considerable but it is now time to move to more proportionate TSE controls whilst continuing to protect public and animal health, in line with:

- the decline in the BSE epidemic (see data at figure 1 below) and the scientific advice from SEAC on scrapie
- the EU Commission's TSE Roadmap and TSE work programme

Figure 1: Bovine Spongiform Encephalopathy passive and active surveillance cases reported 21 August 1988 to 31 December 2007. Further statistics are available on the Defra website¹⁴.



¹⁴ <http://www.defra.gov.uk/animalh/bse>

Appendix 2: Structure of the livestock and abattoir industry

Size and shape of the livestock sectors in England

The livestock primary production sector in England is made up of a very varied range of systems and patterns. The table below (table 1) shows the size of the main TSE susceptible species in England – beef cattle, dairy cattle and sheep. There are other TSE susceptible species kept in England, particularly goats and deer. However, these sectors have not at this stage been included in this analysis because of their small size.

Table 1 – Livestock sectors in England¹⁵

Sector	Holdings	Population
Dairy cattle	14,772	1,290,230
Beef cattle	28,293	739,039
Total cattle (inc beef, dairy and other cattle)	54,499	5,378,028
Sheep	50,065	15,673,409

The average number of dairy cattle on *dairy* holdings in England is 90. Of approximately 15,000 dairy holdings in England, 71 per cent have fewer than 100 dairy cattle. 29 per cent have over 100 dairy cattle.

By contrast, the average number of beef breeding cattle on *beef* holdings is 26. Of approximately 28,500 beef holdings in England, 72 per cent have fewer than 30 beef breeding cattle, while only 4 per cent have 100 beef breeding cattle or more.

Between 2002 and 2006 the number of cattle holdings overall has fallen slightly from approximately 57,000 to approximately 54,500, with beef herd holdings increasing in number and the number of dairy herd holdings falling.

39% of the 50,800 *sheep* holdings in England have 50 sheep or fewer, against an average of 310 sheep per holding. 19% of holdings have more than 500 sheep.

The UK market in cattle and sheep products

Table 2 below shows the value of UK cattle and sheep production and the UK product share of the UK market. The UK milk market is currently oversupplied, while domestically produced mutton and lamb and beef and veal all currently take more than 80 per cent of the UK market. UK self-sufficiency in all sectors except milk has declined since 1998. However, it is worth noting that levels of self-sufficiency have varied considerably over recent years¹⁶.

Table 2 – Value of UK production 2006¹⁷

Product	Value of UK production (£ million)	UK production as percentage of total supply for use in the UK (2006)
Beef and veal	1,568	81%
Mutton & lamb	702	89%
Milk (exc milk products)	2,501	104%

UK production relative to that of the EU (27) in 2005 represented a relatively small proportion (i.e. <10 %) of EU output, apart from sheep-meat and chicken meat.

Competition and the impact of demand and supply elasticities are discussed in more detail in the Competition Assessment at section 7 of the main body of this paper.

Overview of the structure of the abattoir sector

¹⁵ From the June Agricultural Census, 2006

¹⁶ For more details, please see Agriculture in the UK, 1998-2006

¹⁷ From Agriculture in the UK, 2006

There are approximately 300 red meat abattoirs in Britain, of which around 235 are in England (24 are in Wales and 39 are in Scotland)¹⁸. Currently around 77 abattoirs in GB are approved to process OTM cattle of which around 55 are in England.

Table 3 below shows the number of red meat abattoirs in each Government Office region of England for 1999 and 2007. Whilst this is a crude measure and does not take into account such factors as population, the structure of agriculture in the region, or their location within the region, it illustrates the concentration of abattoirs in clearly defined geographical areas.

Table 3 – red meat abattoirs by region, 1999 and 2007¹⁹

	Area Sq km	No of abattoirs		Sq km covered per abattoir	
		1999	2007	1999	2007
North East	8592	18	11	477.33	781.09
North West	14165	51	35	277.75	404.71
Yorkshire and the Humber	15441	54	34	285.94	454.15
East Midlands	15627	58	33	269.43	473.55
West Midlands	13004	50	33	260.08	394.06
Eastern	19120	34	24	562.35	796.67
South East	19096	17	15	1123.29	1273.07
South West	23829	56	50	425.52	476.58
TOTAL ENGLAND	130422	338	235	385.86	554.99

In all regions, the number of abattoirs declined between 1999 and 2007, with the total number of abattoirs in England having fallen by 30%. This is in line with a wider trend: the number of abattoirs in Great Britain has been falling consistently since the early 1970s.

According to a 1999 Meat and Livestock Commission (MLC) report, most of the closures that occurred in the early 1990s were in the smaller abattoirs, and therefore had little impact on overall industry-wide capacity. The report stated that the abattoir industry suffers from over capacity, and also cited high exit and low entry barriers. The low profit margins of the larger abattoirs meant there are few people willing to pay a commercial price to take over a business. Coupled with redundancy costs this lead to high exit costs, which often lead to bankruptcy. This had the effect of releasing assets onto the market which could be bought at 'firesale' prices, hence low entry costs. Due to high exit and low entry barriers, and despite excess capacity, many abattoirs have tried to maximise throughput to cover overheads. With the number of slaughters remaining fairly level, the market share of the large abattoirs has risen.

¹⁸ MHS and FSA websites

¹⁹ Defra and MHS websites