Title:

Implementation of electronic reporting for sheep, goats and deer

IA No: 1532

Lead department or agency:

Defra

Other departments or agencies:

Rural Payments Agency

Animal Health and Laboratories Agency

Impact Assessment (IA)

Date: 27/09/2013

Stage: Final

Source of intervention: Domestic

Type of measure: Secondary legislation

Contact for enquiries:

RPC Opinion: GREEN

Policy: Susan Warner: 01270 754955 Economics: Robert Young: 0207 2383248

Summary: Intervention and Options

Cost of Preferred (or more likely) Option							
		Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out?	Measure qualifies as			
£5.709m	£0.742m	£-0.071m	Yes	OUT			

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

The current paper method of reporting sheep, goat and deer movements is burdensome for industry. There are delays in loading movement information on to a central database by Local Authorities (LAs) and due to budgetary pressures some have ceased entering movement data. The result is unreliable and out of date movement information which jeopardises Government's ability to trace animals in a disease outbreak. As recommended by the Government's Task Force on Farming Regulation, the solution is electronic movement reporting which offers both savings to industry and more timely and accurate data. This will require a change to legislation covering England.

What are the policy objectives and the intended effects?

Replacing the paper movement reporting system for moves of sheep, goats, and deer, with a new electronic system/database with necessary changes to domestic enforcement legislation.

The new e-movements system/database will reduce industry's reporting costs. It will provide much more timely and effective data to enable quicker tracing of these animals in a disease outbreak leading to a reduction in disease control costs. It will mitigate an EU infraction risk from current deficiencies in movement data. Without having to rely on LAs for movement data capture a significant reduction in current reporting costs will be delivered. It will also provide additional management benefits for industry over time

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

Three policy options have been considered: (i) Option 0: Do nothing; keep the existing paper only method of reporting sheep, goat and deer movements; (ii) Option 1 – Commercially operated database for electronic reporting (iii) Option 2 - Government operated database for electronic reporting. The Farming Regulation Task Force recommendation (i.e. Option 1) is the preferred option because it represents a cost saving over a 10 year period, sits well with the Government's cost and responsibility sharing agenda and delivers improvements to the current system.

Will the policy be reviewed? It will/will not be reviewed. If applicable, set review date: 04 / 2019							
Does implementation go beyond minimum EU requirements? No							
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes/No	< 20 Yes/No			Large Yes/No		
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			Traded: n/a	Non-t	raded: n/a		

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:

GEORGE EUSTICE Date: 13-02-2014

Summary: Analysis & Evidence

Description:

FULL ECONOMIC ASSESSMENT

	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
Year 2012	Year 2013	Years 10	Low: Optional	High: Optional	Best Estimate: 5.709		

COSTS (£m)	Total Tra (Constant Price)	ansition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	Optional
High	Optional	3	Optional	Optional
Best Estimate	1.533		0.403	4.913

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

Industry:

Equipment purchases and maintenance (a transition cost of £68,000, average annual cost of £11,000); one-off cost of testing link to the service provider's database (£40,000);

printing movement forms for hauliers (rising annual cost averaging £12,000) - in total, £108k transitional and £23k annual costs.

Government

One-off cost of developing the new system and links to the current sytem (£1.425m); annual contract with service provider (average £380,000) (all costs to nearest £1,000)

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

Reporting goat and deer movements is not costed, as these account for less than 2% of the total moves for the species covered by this measure

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	0		1.261	10.622

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

Industry: Savings on staff time filling out movement forms (rising annual benefit averaging £98k in first 10 years); savings on postage of paper forms (rising annual benefit averaging £28k) - in total £127k annually

Government: Savings on printing and distribution of paper movement forms (£60k annually from 2014); annual savings from 2014 on payments to BCMS for data entry (£1.2m) - £1.134m on average, 2013-2022

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

Industry: Improved and better informed response to disease outbreaks, leading to reduced disruption following an outbreak; potential performance improvements from detailed management performance data

Government: Improved and better informed response to disease outbreaks, leading to reduced costs for management and compensation following an outbreak.

Reporting goat and deer movements is not costed, as these account for less than 2% of the total moves

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Keepers will begin to adopt IT over the period analysed

Sheep movement volumes will remain relatively unchanged over the period analysed

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0.028	Benefits: 0.099	Net: 0.071	Yes	OUT

Summary: Analysis & Evidence

Description:

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
Year 2012	Year 2013	Years 10	Low: Optional	High: Optional	Best Estimate: -7.609		

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	6.215		1.393	18.019

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

Industry: Equipment purchases and maintenance (a transition cost of £68,000, average annual cost of £11,000); one-off cost of testing link to the service provider's database (£40,000); printing movement forms for hauliers (rising annual cost averaging £12,000 over first 10 years).

Government: One-off cost of commissioning AMLS interface and database (£6.106m); annual running costs and maintenance (£1.013m); bureau for paper submissions (falling annual cost averaging £358,000). Estimated costs, benefits and net values/NPVs for this option are shown at Annex A

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

Reporting goat and deer movements is not costed, as these account for less than 2% of the total

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	0		1.236	10.410

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

Industry: Savings on staff time filling out movement forms (rising annual benefit averaging £98,000 in first 10 years); savings on postage of paper forms (rising annual benefit averaging £28,000)

Government: Savings on printing and distribution of paper movement forms (rising annual benefit averaging £29,000); annual savings on payments to BCMS for data entry (£1.2m) – £1.134m on average, 2013-2022

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

Industry: Improved and better informed response to disease outbreaks, leading to reduced disruption following an outbreak; possible performance improvements from detailed performance data Government: Improved and better informed response to disease outbreaks, leading to reduced costs for management and compensation following an outbreak.

Reporting goat and deer movements is not costed, as these account for less than 2% of the total

Key assumptions/sensitivities/risks

Discount rate (%) 3.5

Keepers will begin to adopt IT over the period analysed

Sheep movement volumes will remain relatively unchanged over the period analysed

There is a risk that government will not deliver the required IT development to the timetable required.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0.028	Benefits: 0.099	Net: 0.071	Yes	OUT

Evidence Base (for summary sheets)

Problem under consideration and rationale for intervention

- 1. The current method of reporting sheep, goat and farmed deer movements is via a paper based system. There can be a considerable time lag of up to 10 15 days before the data on paper movement documents is received and loaded manually onto the government's Animal Movement Licensing System (AMLS) by Local Authorities (LAs).
- 2. Tracing livestock in a disease outbreak is essential for the implementation of controls to reduce the spread and impact of disease. This information is collected and coordinated by government as the benefits of providing accurate reports accrue to other keepers from the resulting reductions in spread.
- 3. This tracing requires an up-to-date central database of livestock movements. In England this is the AMLS. Cattle and pig moves are reported electronically. Sheep, goats and deer are presently reported on paper. Destination farmers, markets and abattoirs post a completed movement document to their LA to manually input the data onto AMLS. This work is funded through the Revenue Support Grant. The funding is not ring fenced.
- 4. Paper based systems are burdensome for industry. LAs also have internal budget and resource pressures. Local priorities are resulting in delays in recording movements (with some LAs ceasing recording altogether). AMLS data is becoming out of date and unreliable. The problem will get worse
- 5. Deficient AMLS data jeopardises the Government's ability to trace animal movements in a disease outbreak. Present gaps in the movement data due to the gaps in LAs data inputting are being filled in at significant cost to Government. Defra is funding the Rural Payments Agency to input movement data which would otherwise be undertaken by LAs.
- 6. Allowing electronic reporting therefore improves information available to reduce disease spread in an outbreak and reduces the burden of reporting on industry.

Geographical Location

7. This assessment covers England. Animal health and disease control is a devolved competence. The GB Devolved Administrations report livestock moves into AMLS.

Policy Objectives

- 8. The objective is to ensure the timeliness and accuracy of movement data for sheep, goats and deer by introducing an electronic movement reporting system delivered by a commercial service provider in place of LAs which will deliver a more efficient and less burdensome reporting route for industry and reduce costs for Government. High throughput IT enabled businesses such as markets and abattoirs would report electronically and farmers who are not e-enabled or who are not able to do so could choose to continue to report on paper to that single service provider. The desired outcomes are to
 - (i) protect and improve Government's ability to quickly trace animal movements in a disease outbreak, leading also to a reduction in the cost of controlling outbreaks
 - (ii) deliver compliance with EU law, mitigating the risk of EU infraction proceedings due to deficient AMLS data
 - (iii) deliver a reduction in the movement reporting burden and reporting costs on industry.
 - (iv) deliver a reduction in Government costs.
- 9. Intervention is necessary to permit electronic movement reporting through amendments to domestic implementing legislation, otherwise, there are no changes to industry's existing (EU origin) obligations on the identification and recording of these species.

Consultation

- 10. A public consultation on the introduction of electronic movement reporting for sheep, goats and deer ended on 20 September 2013. Significant support was received for Defra's plans from the representatives of livestock markets, hauliers and abattoirs and LAs for these businesses to have to e-report moves. Sheep keepers and their representative bodies overwhelmingly welcomed the proposal for them to have the choice to e-report (paper reporting farmers will however receive encouragement and assistance to use the e-movements system free of charge from the service provider, in line with the Government's Digital by Default strategy and its 'assisted digital' approach. This service is included in the cost of the contract). There was a consensus in responses that electronic reporting had significant advantages over paper-based reporting by reducing the record keeping burden for the industry. Respondents agreed that it is a more effective tool in the event of a disease outbreak as movements could be traced more rapidly than in the current paper system.
- 11. No objections were received to the pre consultation fast track regulatory triage assessment of industry's costs which accompanied the consultation. We have therefore used the same assumptions but updated industry cost figures with the latest 2012 data and government costs using with the transaction charges to Defra from the e-reporting service supplier's contract and other implementation costs. The tables in the monetised and non-monetised section have been updated with the revised costs.

Options considered

12. There are three options, outlined in the table below with Option 1 as the preferred approach:

Table 1: Options

Option	Description
0	Current system, Do nothing - retain paper reporting to AMLS (data input by LAs) necessitating expensive and unbudgeted arrangements to bring data inputting from LAs in house as they (would) withdraw from this activity due to resource pressures.
	A commercially operated e-reporting database and paper bureau service (for keepers)
1	Underpins AMLS, delivers e-reporting and a centralised paper movement reporting service and offers other commercial benefits (services) to industry. Costs for the development and maintenance of the system will be shared by government and industry. Government will pay for the statutory data it requires and for enforcement bodies access to the system. Industry will be able to pay for any developments to the system which would deliver commercial service/benefits to them.
	Markets and abattoirs will be required to report movements electronically to the database but farmers can report electronically or by paper.
2	Government develops / manages a new database (+ paper bureau service) All costs absorbed by government. More expensive than other options. Markets and abattoirs required to report movements electronically to the database but farmers can report electronically or by paper. It is expected that the costs to government of building and maintaining a database and separate paper bureau service would be greater than for a private contractor, as private firms have greater incentive to identify and address inefficiencies.

Note: The term 'industry' covers, sheep, goat, farmed deer keepers, markets and abattoirs.

13. Following the recent public consultation, Option 1 (commercial e-reporting system and underpinning database and a paper bureau service for farmers not e-reporting) has been confirmed as the preferred approach.

The preferred option

14. Option 1 (commercially operated database) is the preferred option. It is significantly less costly than option 2. The consultation demonstrated clear support for this option which sees Government and industry working together to develop a database to seize the opportunities arising from EID and provide for more efficient and timely reporting of sheep, goat, and deer movements. The delivery timetable indicates that electronic reporting and a parallel (free) paper bureau service (for non-IT enabled keepers) could launch from April 2014.

- 15. Option 1 represents a saving to industry equivalent to approximately £71,000 a year (in 2009 prices, as a 2010 'present' value) compared to the current system. It resolves the issue of inaccurate movement data on the AMLS system and Governments associated EU infraction risk.
- 16. Following a competitive tender process a service provider (SouthWestern Businesses Process Services (UK) Ltd.) with extensive experience in delivering livestock traceability systems and transitioning from paper to electronic services has been contracted to build and deliver a commercially operated electronic movement reporting database/service, and a paper bureau service for non-IT enabled farmers. The option costs cover the gathering of electronic movement data for nightly transmission to AMLS and the paper bureau service. On the basis of the contract transactional charges per movement and expected volumes of animal movements the annual costs are estimated at an average of £422k a year .
- 17. The function to capture statutory sheep, goat and deer movement data will be transferred to SouthWestern Business Process Services (UK) Ltd. From April 2014 these moves will be recorded on their new database which will interface with the Government's AMLS system. Their system will hold individual animal movement data but will upload on a daily basis the legally required batch level information to AMLS (operative since 2003 but not developed to hold individual data). This will ensure the legally required central Government database holding all livestock movements has an up to date set of sheep, goat and deer moves. Markets, collection/assembly centres and abattoirs will report all moves through their premises electronically. Keepers will have the choice to report electronically or continue with a paper reporting route free of charge using a bureau service operated by SouthWestern. So, non IT enabled keepers will not be forced to buy computers following the introduction of electronic reporting.

Legislative implications and timetable

- 18. Detailed conditions under which livestock movements are permitted in England are contained in a series of species specific 'General Movement Licences', made under the Disease Control (England) Order 2003. Specific requirements in EC Regulation 21/2004 governing the identification and traceability of sheep and goats are implemented and enforced in England under the Sheep and Goats (Records, Identification and Movement) (England) Order 2009 "SAGRIMO". The Order and Licences will be amended to provide for moves to be reported electronically and for 'paper move' AML movement documents to go to South Western.
- 19. The proposed changes do not impact upon the EC Regulation (which does not preclude e-reporting).

Timescale

20. Domestic legislation must be amended to provide for electronic reporting in addition to paper reporting and for paper movement documents to go to the new service provider instead of LAs. The intention is to implement electronic reporting from April 2014.

Key Volumes and impacts of electronic reporting by main industry area

- 21. The introduction of electronic reporting will affect most sheep, goat and farmed deer moves. Sheep represent over 98% of these moves of which c.70% are through markets and abattoirs.
- 22. Details on sheep, goat and deer 2012 data (England only) are in the tables below:-

Animals*	Numbers	Animals moved	Number of movement docs	Keepers	Markets	Abattoirs
Sheep	14,500,000	22,500,000	587,890	47,000	83 with a	175
Goats	79,00	47,000	9,000	7,800	throughput of	
Deer (farmed)	21,000	570	2,665	≤500	sheep/goats	

^{*}numbers from Defra June Survey of Agriculture 2012 (sheep includes lambs slaughtered January to June).

Movement type	Movements (batches, sheep only)
Farm to farm	106,429
Farm to market	243,554
Farm to abattoir	101,078
Market to farm	80,187
Market to abattoir	56,641
Total	587,890

N.b. the annual number of sheep movements exceeds the number of animals as sheep are moved multiple times (to and from markets and finishers).

Monetised and non-monetised costs and benefits of each option

- 23. Current LA recording of sheep, goat and deer movements onto AMLS is funded through the Revenue Support Grant (RSG) in the region of £2m pa as well as approximately £0.06m by DEFRA to print and distribute paper movement documents. DEFRA has also had to fund an additional £0.25m to cover in-house arrangements to get on to AMLS movement documents for non-reporting LAs this financial year. This would increase to c. £1.2m p/a if all LAs withdraw from AMLS data entry. The on-going annual cost of option 0 is estimated to be in the region of £3.26m pa.
- 24. The costs and benefits for options 1 and 2 are measured relative to option 0 i.e. costs greater than or additional to those described in preceding paragraph for option 0 are measured as costs and those costs which are less than option 0 or do not arise under option 1 and 2 are measured as benefits (cost savings).
- 25. As sheep account for over 98.5% of the combined sheep, goat and deer moves, the estimated costs and benefits (between the current and proposed systems) are based only on sheep data. The advent of electronic identification will underpin a sustainable electronic movement reporting system.
- 26. Costs have been assessed over a 10 year period for the agreed approach Option 1. These start with transitional costs in 2013 with running costs from 2014 when the commercial electronic database will be fully operational.

Table 2: Option 1 – Main monetised costs to industry above Option 0)

Change from current system	Nature of cost	Comment
Purchase of EID readers for abattoirs and markets who do not have this equipment	A transitional cost of c. £68,410 to industry based on equipment prices of £185 - £550 and the size and number of affected businesses	Prices based on internet search 2012/13: 1) 15 large abattoirs x 3 stick readers @ £550 each = £24,750 2) 35 medium abattoirs x 1 stick reader @ £550 each = £19,250 3) 126 small abattoirs x 1 basic reader @ £185 each = £23,310 4) 2 small markets x 1 stick reader @ £550 each = £1,100 Most markets already have this equipment, and farmers have the option to continue reporting by paper.
Interface testing: to test that data is transferred accurately from markets and abattoirs to the new database	A transitional cost to industry of estimated as £40,000.	Original assumption. This was not substantively challenged in consultation.
Upkeep for EID readers	An annual cost to industry of c. £13,000.	This covers maintenance and replacements of the equipment mentioned above. This is based on the assumption of maintenance costs at 20% of purchase costs
Printing AML1 forms: for keepers using e- reporting to give to hauliers or retain	A rising annual cost to industry of £8,000 - £33,000	We assume that more farms will move to e-reporting over time (up to 40% over ten years). Given current movement data the number of movement documents printed will rise from 45,000 to 180,000 at a cost of £0.18 per document for up to three copies.

There are also costs to government from implementing the new database and linking the new and existing systems (transitional costs of approximately £1.425m) and an on-going cost of the contract with the database supplier (an average cost approximately £422,000 per annum, over 9 years). Table 4 contains more details.

Table 3: Option 1 – main monetised benefits to industry compared to Option 0

Change from current system	Nature of Benefit	Comment
Labour – completing AML1 forms and adjusting flock registers electronically rather than by hand	A rising annual benefit to industry of £48,000 - £175,000 based on estimates of completion times and wages	Savings are due to reduced staff time completing forms, as these can be automatically populated rather than completed by hand. As more farmers move to electronic reporting over time, these savings rise. Labour rates are taken from the Annual Survey of Hours and Earnings 20121; timings are taken from the ADAS field trials report2 (table 19).
Postage for AML1	A rising annual benefit to industry of £9,000 - £60,000 based on current volumes and postage prices	Cost savings arise from submitting forms over the internet rather than by post. These savings increase over time as more businesses adopt electronic reporting. Postage costs of £0.60 for farmers are assumed based on first class post (to comply with reporting deadlines), and £0.92 per 25 documents for larger premises.

There are also cost savings to government as movement forms do not need to be printed and distributed, and payments to BCMS to cover data entry are no longer required (total savings of £1.26m annually).

Table 4: Option 1 - best estimate over 10 years: Costs (£ - 2012 constant prices)

Table 4. Opt	1011 1 - 06	ot com	iale over	10 year	10 years. Costs (£ - 2012 constant prices)								
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total		
Industry													
Equipment		34755	33655								68410		
Testing	40000										40000		
Equipment upkeep		6731	13462	13462	13462	13462	13462	13462	13462	13462	114427		
Printing				8119	8119	8119	20298	20298	20298	32476	117727		
Industry Total:	40000	41486	47117	21581	21581	21581	33760	33760	33760	45938	340564		
Government													
Interface	182000	50000									232000		
UAT	50000										50000		
Implementation	665152	265642	131241	26618							1088653		
Helpline		40774	13351								54124		
Contract		429987	493727	420806	400186	392339	418818	421773	413503	405395	3796533		
Gov. Total:	897152	786403	638319	447423	400186	392339	418818	421773	413503	405395	5221310		
Total	937152	827889	685436	469004	421767	413920	452577	455532	447262	451333	5561874		

Table 5: Option 1 - best estimate over 10 years: Benefits (£ - 2012 constant prices)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Industry											
Labour		48460	48460	100277	100277	100277	137462	137462	137462	174646	984783
Postage		8963	8963	25964	25964	25964	42759	42759	42759	59555	283650
Industry Total:		57423	57423	126241	126241	126241	180221	180221	180221	234201	1268433
Government											
Printing/Distribution		60000	60000	60000	60000	60000	60000	60000	60000	60000	540000
LA/BCMS		1200000	1200000	1200000	1200000	1200000	1200000	1200000	1200000	1200000	10800000
Gov. Total:		1260000	1260000	1260000	1260000	1260000	1260000	1260000	1260000	1260000	11340000
Total		1317423	1317423	1386241	1386241	1386241	1440221	1440221	1440221	1494201	12608433

¹ Farmers labour: code 5111 (farmers) - £9.78/hr. Labour at markets: code 5119 (agricultural and fishing trades) - £9.09/hr, Labour at abattoirs: code 8111 (food, drink and tobacco operators) - £8.61/hr. All hourly rates were then uplifted by 30% to account for non-wage costs (leave, illness, employer pension contributions etc.)

² ADAS field trials in support of producing a Regulatory Impact Assessment for sheep identification in England, ADAS, 2006

Table 6: Option 1 - best estimate over 10 years: Net Values and NPVs (£ - 2012 constant prices)¹

Year:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
Industry net	-40000	15937	10306	104660	104660	104660	146461	146461	146461	188263	927868
Industry NPV	-40000	15398	9620	94397	91205	88121	119146	115117	111224	138134	742363
Government net	-897152	473597	621681	812577	859814	867661	841182	838227	846497	854605	6118690
Government NPV	-897152	457582	580346	732898	749278	730547	684302	658839	642840	627050	4966531
Total net	-937152	489534	631987	917237	964474	972321	987644	984689	992959	1042868	7046559
Total NPV	-937152	472979	589967	827295	840483	818668	803449	773956	754064	765185	5708894

(1) NPVs discounted at 3.5% pa to 2013

Overall monetised costs for the preferred Option 1 – commercial database

27. Option 1 represents a net overall benefit of £5.709 million (best estimate). This includes a net benefit to industry of £0.928 million, equivalent to an EANCB of £-0.071m in 2009 prices and discounted to 2010. Option 1 is preferred as it addresses the shortcomings and risks associated with Option 0 while making a cost saving. Option 2 by contrast has a net overall cost of £7.6m above that of option 0. Option 2 costs are greater because it is significantly more expensive for government to develop build and roll out an in-house IT system compared to a commercially developed solution. Estimated costs, benefits and net values/NPVs for that option are shown at Annex A.

Non Monetised Benefits

- 28. The introduction of electronic reporting contributes to a number of benefits which it has not been possible to monetise. These include:-
 - Significantly less reliance on paper recording for industry and Government.
 - A more accurate record of sheep holdings.
 - Greater partnership working/responsibility sharing between industry and government.
 - Provision of a facility to offer keepers value added voluntary (commercial) services to take advantage of their animal's individual identification data. This would provide management benefits. For example, these keepers could use the individual performance information to make their businesses more profitable e.g. in such areas as flock health status, lambing ratios, carcass quality, weight etc.
 - The collection of EID read rate data (e.g. at markets) on the service provider's database could provide evidence to underpin future EU negotiations on an EID record keeping tolerance for keepers to reduce the risk of cross compliance penalties to their Single Farm Payments.
- 29. Expert opinion³ suggests that an outbreak of FMD will occur on average about once every 25 years with 95% chance of it being a minor outbreak having an average cost to government of £50m, and a remaining 5% chance of being a major outbreak costing around £400m. From this, we calculate that the expected cost of FMD outbreaks per year is about £3m. It is not easy to put a figure on the benefit of reducing these costs from an accurate movements database and the limited available modelling work tends to suggest that the effect is small. However, supposing that weaker tracing increases the average cost of an outbreak by between 1% and 10%. The benefit would then be £30k to £300k per annum. Given the uncertainty surrounding these estimates we have not included them as a monetised benefit in the analysis above. They are mentioned here to give an indication of the order of magnitude of such benefits.

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³ Quantifying experts' uncertainty about the future of exotic disease by J P Gosling, A Hart, D Mouat, M Sabirovic, S Scanlan, and A Simmons. Risk Analysis Vol 32 Issue 5 p881 to 893, May 2012-08-01

Rationale and evidence that justify the level of analysis used in the IA

- 30. This Impact Assessment has been subject a public consultation and to stringent assurance to ensure the Minister has robust evidence upon which to base decisions regarding the Task Force recommendations including:
 - Input from economist colleagues to ensure it presents a best estimate of costs and benefits;
 - Input from Defra's Better Regulation Unit, to ensure it is fit for purpose, and fits with BIS guidelines;
 - Ongoing engagement with relevant policy teams across Defra, to ensure that all impacts are considered and accurately represented, and that risks and assumptions are validated;
- 31. The commercial reporting service has been discussed extensively with key industry bodies.

Risks

- 32. A database with incomplete data leaves us open to infraction proceedings by the EU as we would be seen to be unable to trace sheep, goat and deer movements effectively in the event of a disease outbreak. This situation would effectively take us back to the pre FMD 2001 situation where centralised movement records were unavailable.
- 33. The introduction of electronic reporting will not generate any increased risks of non-compliance. There are always a very small number of keepers who do not comply (whatever system is used) and there is no reason to suppose this would increase with the introduction of electronic reporting given that farmers can continue to use a paper reporting system. We will minimise this risk through the 'Assisted Digital' approach advocated in the Government's digital strategy.
- 34. The risk of system failure has been addressed through the contract with the service provider providing for system redundancy.
- 35. We have also considered the risk of 'regulatory failure' i.e. an unintended effect of the preferred option that, if it occurred, could mean the costs of that option would appreciably outweigh the benefits. However, as paper reporting remains an option, for farmers, they will not take up electronic reporting unless the costs to them of doing so are lower and less burdensome (as expected). The transaction costs from the contracted service provider (SouthWestern) are such that, even if no keepers report electronically, SouthWestern will still provide more accurate data entry at a lower cost than at present.

Wider impacts

Specific Impact Tests

Businesses to be affected:

36. The options outlined in this IA will apply to 'micro businesses', principally because approximately 98% of farming businesses are classified as such⁴. Farms can continue to report by paper so the proposal will have little impact on them. Markets and abattoirs will be required to report electronically but as they already hold the necessary data in their back office IT systems the impact should be minimal. There will be a short transitional period when markets and abattoirs will need to deploy staff on testing their interfaces to the new electronic movement reporting system but once operational, electronic reporting will save them time compared to the paper system.

37. Small and micro business impacts

The changes are potentially deregulatory for micro businesses (a workforce of fewer than 10 full time equivalents). Virtually all the registered keepers (around 47,000 for sheep and 8,000 for goats) are micro-businesses but as the move to electronic reporting will be voluntary for them they should be regarded as being out of scope of the moratorium. There will be savings (in time and postage) for those keepers who move from paper to electronic reporting which should of course encourage voluntary uptake. The majority of markets and abattoirs will not fall into the micro business category. We do not know exactly how many are micro or small businesses as this information was not

⁴ http://www.bis.gov.uk/policies/bre/small-businesses

supplied in consultation, but we estimate (based on throughput) there could be up to 88 abattoirs and 2 markets. Overall markets and abattoirs are expected to enjoy net cost savings but some small markets and abattoirs will need to purchase equipment, resulting in short-term costs which are recouped. The impact on these businesses is therefore expected to be minimal, with potential savings on postage. On the basis of these various impacts on micro businesses, we have sought a waiver to the moratorium. Approval to consult on this basis was received on 29/7/2013.

38. One in, Two Out (OITO)

The SAGRIMO (England) 2009 Order implements EC Regulation 21/2004 which sets out the rules which every Member State must comply with for the identification and tracing of sheep and goats. The legislation is explicit that movements of sheep and goats <u>must</u> be reported to a central database. These changes will enable electronic movement reporting as well as paper reporting. Farmers will have the choice of reporting method and markets, abattoirs who support the measure will electronically report, lowering the costs of compliance for industry. This amendment is in scope for "one-in, two-out" and delivers an overall benefit to industry generating a net "out". Following completion of the consultation and updates with 2012 instead of 2011 figures for industry, the Equivalent Annual Net Cost to Business is confirmed at - £0.071m (i.e. a saving) over 10 years in 2009 prices, discounted to 2010.

Competition assessment

39. Reporting sheep, goat and deer movements is a legal obligation which businesses already comply with. The proposal (e-reporting) is a change in the method and will not affect the structure of the industry. To the extent that the proposal lowers costs, it will encourage fair competition. For farmers, the option to continue to report movements via paper will remain.

Small firms impact test

40. Electronic reporting still means keepers, markets, and collection/assembly centres have to produce movement documents to accompany consigned animals. Receiving keepers can choose to report electronically for markets, abattoirs, collection and assembly centres electronic reporting will be mandatory so again it is the method not the requirement that will change. The impact will be the same for businesses (large and small) and will provide overall savings.

<u>Discussions with representatives of small businesses</u>

41. Livestock industry bodies, representing small, medium and large agricultural businesses were consulted in the development of the service specification used to tender for contracted service supplier. They are content that this proposal should not disproportionately affect small businesses.

Summary and preferred option

- 42. Option 1 (commercial e-reporting system/database) is the preferred option. It addresses the problems identified with maintaining fit for purpose animal movement data (an unmitigated EU infraction risk under the baseline/do nothing Option (0)) and in the event of a disease outbreak improve our ability to trace animals resulting in a reduction in outbreak management costs and a quicker return to normal trading for industry. It does so at a much lower cost than Option 2 (Defra built database) with a reduced overall cost to industry of movement reporting
- 43. There is a clear rationale for implementing a commercially operated electronic movement reporting system. It fits with Government's cost and responsibility sharing agenda and is consistent with its Digital by Default Strategy for services. It provides industry with the opportunity to adapt it in future to take advantage of additional voluntary commercial services of benefit to sheep producers using their animal ID data. It is strongly advocated by the industry led Farming Regulation Task Force.
- 44. The response to the consultation demonstrated significant support for the introduction of electronic reporting for these species. Comments focused on processes which we are addressing with the contracted service supplier through regular meetings of an industry bodies liaison group. The electronic system with the paper bureau service to support non IT enabled keepers was seen as offering a modernised but flexible solution.

Option 2 – Government Database Costs and benefits over a 10 year period

Option 2 costs by item (at 2012 constant prices)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Industry											
Equipment		34755	33655								68410
Testing	40000										40000
Equipment upkeep		6731	13462	13462	13462	13462	13462	13462	13462	13462	114427
Printing				8119	8119	8119	20298	20298	20298	32476	117727
Industry Total:	40000	41486	47117	21581	21581	21581	33760	33760	33760	45938	340564
Government											
Interface	106470										106470
Database	6000000										6000000
Maintenance	165000	300000	300000	300000	300000	300000	300000	300000	300000	300000	2865000
Running costs	0	618750	825000	825000	825000	825000	825000	825000	825000	825000	7218750
Indep. paper bureau	0	373061	497415	447674	447674	447674	373061	373061	373061	298449	3631130
Gov. Total:	6271470	1291811	1622415	1572674	1572674	1572674	1498061	1498061	1498061	1423449	19821350
Total	6311470	1333297	1669532	1594255	1594255	1594255	1531821	1531821	1531821	1469388	20161914

Option 2 benefits by item (at 2012 constant prices)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Industry											
Labour		48460	48460	100277	100277	100277	137462	137462	137462	174646	984783
Postage		8963	8963	25964	25964	25964	42759	42759	42759	59555	283650
Industry Total:	0	57423	57423	126241	126241	126241	180221	180221	180221	234201	1268433
Government											
Printing/Distribution	0	20780	20780	32925	32925	32925	37438	37438	37438	41950	294599
LA/BCMS	0	1200000	1200000	1200000	1200000	1200000	1200000	1200000	1200000	1200000	10800000
Gov. Total:	0	1220780	1220780	1232925	1232925	1232925	1237438	1237438	1237438	1241950	11094599
Total	0	1278203	1278203	1359166	1359166	1359166	1417659	1417659	1417659	1476151	12363031

Option 2 net (at 2012 constant prices and present values)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Industry net	-40000	15937	10306	104660	104660	104660	146461	146461	146461	188263	927868
Industry NPV	-40000	15398	9620	94397	91205	88121	119146	115117	111224	138134	742363
Government net	-6271470	-71031	-401635	-339748	-339748	-339748	-260624	-260624	-260624	-181499	-8726752
Government NPV	-6271470	-68629	-374931	-306434	-296071	-286059	-212018	-204848	-197921	-133171	-8351551
Total NPV	-6311470	-53232	-365310	-212036	-204866	-197938	-92871	-89731	-86696	4963	-7609188

NPV = net present value (discounted @ 3.5% pa to 2013)