Explanatory Memorandum to the Tuberculosis (Wales) (Amendment) Order 2017

This Explanatory Memorandum has been prepared by the Department for Economy, Skills and Natural Resources and is laid before the National Assembly for Wales in conjunction with the above subordinate legislation and in accordance with Standing Order 27.1.

Cabinet Secretary's Declaration

In my view, this Explanatory Memorandum gives a fair and reasonable view of the expected impact of the Tuberculosis (Wales) (Amendment) Order 2017. I am satisfied that the benefits justify the likely costs.

LESLEY GRIFFITHS AM
Cabinet Secretary for Environment and Rural Affairs

30 June 2017

1. Description

This Order makes a number of changes to the Tuberculosis (Wales) Order 2010 to clarify certain provisions and to provide the Welsh Ministers with powers to implement additional controls to prevent the spread of TB and, in particular, from it becoming established in areas of Wales that are relatively disease-free.

2. Matters of special interest to the Constitutional and Legislative Affairs Committee

The Minister does not wish to bring anything further to the attention of the Committee.

3. Legislative background

This amending Order is being made in exercise of a number of powers conferred by the Animal Health Act 1981, including under Section 1 of the Animal Health Act 1981 which provides for Ministers to make Orders for the purpose of preventing the spread of disease. These powers are exercisable by the Welsh Ministers in Wales through the National Assembly for Wales (Transfer of Functions) Order 1999, the National Assembly for Wales (Transfer of Functions) Order 2004 and section 162 of, and paragraph 30 of Schedule 11 to, the Government of Wales Act 2006.

4. Purpose & intended effect of the legislation

Background

Bovine TB has a significant financial and social impact on affected farm businesses and the wider rural community. It is a disease which is also very costly to the Welsh Government in terms of payment for TB testing, breakdown management and compensation to keepers whose animals are slaughtered (£25.9m in the financial year 2015/16). It is a zoonosis which means it can spread from animals to humans, although the risk to public health is kept low because of regular testing of cattle, milk pasteurisation and inspections at abattoirs.

A European Union framework, formed by legislation (77/391/EEC and 78/52), requires Member States to develop eradication programmes in order to accelerate, intensify or carry through the eradication of TB. We established our TB Eradication Programme in 2008 and a key component of the programme is limiting and preventing the spread of infection by cattle. This includes surveillance and control measures designed to identify infected cattle as early as possible and minimise the risk of the disease spreading. Since January 2010 all herds in Wales are tested at least annually to maintain a high level of surveillance and cattle are also required to have a Pre-Movement Test (PrMT) before they can be moved from a Welsh farm (although there are some exemptions for moves that are considered to be less of a risk).

Cost of TB

TB has a significant detrimental impact on farm businesses. The costs of a TB

breakdown impact both on farmers and the Welsh Government. The Welsh Government is legally obliged to pay for cattle slaughtered because of TB. These arrangements are set out in the Tuberculosis (Wales) Order 2010 (as amended).

The carcass of an animal that has tested positive for TB may have a 'salvage value'. Case law has established that this is the true value of an animal that has tested positive for TB and therefore the compensation paid must be at least the salvage value. Compensation for all cattle slaughtered is determined by individual on-farm valuation on the basis of 100% of market value. The Order includes rules which can affect the amount of compensation a cattle keeper can receive for any animal slaughtered for TB. The most recent change, in 2016, means if the rules have not been followed the amount of compensation may be reduced to as low as 5% of its market value (if it is higher than the salvage value). The Order was also amended to introduce a cap on compensation payments of £15,000.

Compensation is paid for the value of the animal only and not for any consequential losses such as lower milk production or the costs of keeping additional cattle due to TB movement restrictions. Defra estimates the average cost of a TB herd breakdown is around £34,000 (£8,000 to farmers and £24,000 to Government) and we estimate that in 2016 the cost of testing and compensation in the longest-term breakdowns was, on average, £179,000 per herd.

Regional approach

Since the TB Eradication Programme began we have seen some progress towards achieving our goal:

- The number of new incidents has fallen by 42% since the high-point in 2009 and is now at the lowest level in 12 years.

- Over 500 fewer herds are under restrictions because of TB compared to the peak in 2009. This means the proportion of herds with TB has fallen by 36%.

Between 2009 and 2015 there was also a 31% reduction in the number of cattle slaughtered, though this has subsequently turned upwards once more. This increase is primarily as a result of our change in policy to use stricter testing to help prevent the disease becoming established within herds.

With over seven years of annual testing all cattle herds we have built up an extensive dataset showing the true picture of the disease across the country. The disease situation is not uniform across Wales and because of this we are introducing a regional approach to the eradication of TB. We will establish three categories of areas based on the epidemiological evidence of the disease situation in each area:

- Low TB Area – the area where approximately 1% of herds have TB

- Intermediate TB Area – the areas where less than 5% but more than 1% of herds have TB.

- High TB Area – the areas where more than 5% of herds have TB.

For each area, we will tailor our approach to reflect the disease conditions and risks with the aim of protecting the Low TB Area so that it can become TB-free and continuing to drive down disease in the Intermediate and High TB areas.

Objectives

Our objective for all the areas is for them to achieve TB-free status as soon as possible by reducing the number of herds with TB to 0.1% (the Council Directive 64/432/EEC threshold for designation of an officially TB-free area). Whilst in the short-term this is more realistic for the low TB area it is also a longer-term aspiration for the intermediate and high areas providing effective control measures are applied. At the herd level these may not always be the measures that allow the earliest return to normal trade for a TB restricted premises.

To achieve the objective of all of Wales being TB-free, we intend to have a more targeted approach to disease control and prevention in each of the areas. Whilst the level of disease in the low and intermediate areas is different (around 1% and 2% respectively) there is an area of overlap between factors driving the disease i.e. cattle movements. Despite the controls we currently have in place (including PrMT) it is not possible to fully eliminate the risk of TB spreading through cattle movements. We can demonstrate this through molecular epidemiology – analysis of genotyping and movement records, as well as individual case review of breakdowns using local field epidemiological knowledge. This matches the findings of the Independent Scientific Group on Cattle TB which found that a number of undiagnosed TB-infected cattle remain following tuberculin testing, leading to the re-infection within herds and the spread of disease to neighbouring herds and outwards to the rest of the country. Even in the high TB areas, where disease has been confirmed in the local badger population, the movement of undetected infected cattle may be contributing to the spread of the disease.

The disease control priority for herds in all the areas is therefore to protect them from TB being introduced through cattle movements and to increase assurance that herds contain no infected cattle when TB restrictions to enable free trade are removed.

5. Consultation

Late last year we carried out a consultation on new plans for our TB eradication programme, which closed 10 January. The details of the consultations undertaken are included in the Regulatory Impact Assessment.

PART 2 – REGULATORY IMPACT ASSESSMENT

This Regulatory Impact Assessment (RIA) estimates the expected impact of the powers in the Order which will be implemented to achieve the policy objective and disease control priorities set out in Part 1:

1. post-movement testing
2. clearing test
3. cap on individual compensation payments.

The RIA considers where costs or benefits could accrue through the intended use of the powers in the Order. The duration of these policies is undetermined and will be reviewed on an annual basis. For this assessment one off and recurring costs have been identified.

1. POST-MOVEMENT TESTING

Options

Do Nothing.

This would retain the current regime of post-movement testing and therefore represents the baseline against which the other options are compared.

Option 1: Voluntary PoMT

To help achieve the objective it is important to better address the risk of TB spreading through cattle movements. This is most relevant in the low TB area because the epidemiological evidence is that the majority of breakdowns are linked to introduction of undetected, infected cattle and have been resolved quickly.

This is a non-legislative option that, in order to achieve the objective, would rely on a sufficient number of cattle keepers in the Low TB area voluntarily and routinely carrying out a PoMT of cattle moved in to the areas. The potential costs and benefits of this option with depend on the extent of voluntary action taken.

Currently in Wales voluntary private PoMT of animals moved on to a holding is encouraged but is not compulsory. Previous experience with a non-mandatory approach to PrMT, which is similar to a PoMT, suggests that farmers are unlikely to do so voluntarily. Before 2006, owners of cattle herds in some areas where the risk of TB is higher, were urged to pre-movement test their stock – but farmers very rarely did so. This suggests that an approach which encourages voluntary testing is highly unlikely to achieve the objective and, by not addressing the disease control priorities for the low TB area, it risks the disease situation deteriorating. For this reason the interrelated policy of no longer requiring cattle moved from the Low TB area to undergo a PrMT would not be implemented alongside this option.

This option is highly unlikely to help achieve the objective and, by not addressing the disease control priorities for the low TB area, it risks the disease situation deteriorating

Option 2: Area risk based post-movement testing

Under this option cattle moved in to the Low TB area from a Higher TB area will undergo a Post-Movement Test (PoMT). This would apply to cattle moved from the Intermediate and High TB areas of Wales and the Edge Area and High Risk Area of England. A PoMT would be carried out between 60 and 120 days after the movement. Farmers will be encouraged to isolate the cattle from the rest of the herd during this period to reduce the risk of disease spreading but this will not be a requirement of the policy. Like pre-movement testing, the cost is met by the farmer (in this case receiving the cattle). Typical testing costs are £7.50 per animal tested with a fee of £23.83 for each test day, two of which are required and therefore the actual cost is £47.66. There will also be additional on-farm labour costs in gathering and testing cattle.

Monitoring of compliance will be carried out by the Animal and Plant Health Agency (APHA) and non-compliance may result in a herd being restricted, an enforced test being carried out at the farmer's expense and/or a financial penalty (determined by a court of law) for a breach of the Order. The change needed to implement the required monitoring is estimated by APHA as a one off cost of £6,811 with ongoing costs incorporated within existing budgets.

The aim of the policy is to minimise the risk of TB becoming established in the low TB area, supporting the objective of achieving TB-free status. In addition, the policy should encourage farmers to make more risk-based decisions when buying cattle. The primary intended effect is to find disease earlier through testing of higher risk animals that enter the Low TB area to live. Although it has its limitations, post-movement testing helps identify the disease at an earlier stage i.e. before it would be picked up at the next routine herd test which may not be due for up to 12 months. This reduces the risk of disease spreading within herds and prevents the disease from becoming established.

Because the test would be paid for by the farmer, requiring a PoMT for animals moving from a higher risk area could incentivise farmers to source cattle from within their area or an area with a better/comparable disease status. In Scotland, the introduction of pre and post-movement testing in 2005 led to a 34% reduction in the proportion of moves originating from the annually tested areas of Wales and England. Compulsory post-movement testing was in for cattle moved into the low risk area of England from higher risk (annual testing) areas in April 2016. Initial reports from Defra reports are that, when comparing April to September 2015 with April to September 2016, there was a 19% drop in cattle moved from the higher risk areas. Even assuming no behavioural change the PoMT would still reduce the risk of introducing TB into the main herd if the animals were suitably isolated up until the point they are tested.

As part of this option we intend to introduce a policy of no longer requiring cattle moved from the Low TB area to undergo a PrMT. This is because the evidence is that there little risk of disease spreading from this area. Between 2010 and

2016 only 5.5% of breakdowns in the Low TB area were as a result of a positive PrMT (on average 2.5 per year). This is expected to reduce further when PoMT is implemented.

Option 3: Prevent movements

An alternative to testing animals after they have moved in order to meet the objective is to prevent the move taking place. We could legislate for a herd to only move animals to a herd within the same area or an area that has an equal or higher status. This would allow cattle from lower disease areas to move anywhere whereas cattle from higher disease areas would only be able move to the High TB areas in Wales and England, for example:

- a herd in the High TB area would only be able to trade animals with other herds within the High TB areas of Wales or the high risk area of England as only these areas have an equal or higher status

- a herd in the Low TB area would be able to trade animals anywhere in Great Britain as all other areas have an equal or higher status.

This mandatory approach is likely to be the most effective in preventing disease spread from the High and Intermediate TB areas to the Low TB area. Similar monitoring of compliance (estimated cost as a one off cost of £6,811) as in option 1 would be necessary and non-compliance may result in a referral to the local authority.

Based on the evidence that the majority of the few breakdowns in the low TB area are the result of infection brought in through purchased cattle, and assuming a high level of compliance, this option is considered likely to support the low TB area to meet the criteria for TB-free status. As part of this option we would introduce the policy of no longer requiring cattle moved from the Low TB area to undergo a PrMT.

Costs & benefits

This section considers the additional costs and benefits of the short-listed options against the Do Nothing baseline.

Option 1

The cost of this option in terms of testing and fees would depend on take-up and is therefore difficult to accurately estimate (range between £0 and full take-up, as seen in the estimate for option 2). Based on current take-up being very low it is most likely be close to £0. The interrelated policy of no longer requiring cattle moved from the Low TB are to undergo a PrMT will not be implemented for this option due to the risk and therefore the expected cost reductions to the industry from removing the relevant testing requirements would not be accrued. Any effects on total compensation payments would depend on the outcomes arising from the extent of voluntary actions.

Option 2

With the exception of the additional one-off cost to the Welsh Government to establish monitoring all the costs identified with this option are recurrent i.e. are anticipated to be relevant for the duration of the policy (although may alter depending on a change in activity). The direct costs of this option is that cattle keepers would be required to pay for a PoMT and it being administered should they buy animals from areas categorized as higher risk. There is also an associated time and labour costs to gather and test animals which are dependant on the number of animals being tested at any one time, and costs associated with any isolation of such animals?

The estimated number of moves affected, based on 2015 data, is 22,500. This is the number of movements in to the low TB area from a higher[1] TB area. Through further analysis of the data we have identify the number of moves per CPH every two months i.e. assuming that farmers would try to minimise the number of PoMT testing days by having all animals moved on in each 60-day window tested together. This shows that the minimum number of PoMT testing visits that would have been required in the Low TB areas would have been 2,056. The following estimate of the cost is based on this information and assuming no change in farmer behaviour and using a labour cost of £9.75hour[2] (assuming two people, 20 cattle tested per hour on two separate days):

- Annual cost of low TB area post-movement testing = £168,750 (22,500 x £7.50)

- Call out fees for post-movement testing in the low TB area = £97,989 (2,056 x £47.66)

- Labour (at 10 cattle tested per batch) = £40,092 (£19.50 x 2,056)

- Total cost = £306,831

Please note that this is based on historic data and does not take in to account the potential changes in movement patterns for the forthcoming period as a result of these policies.

There would be a direct financial benefit to farmers in the Low TB area from the interrelated policy of no longer requiring cattle moved from this area to undergo a PrMT. Below is an estimate of the direct cost based on 2015 data:

- Number of movements originating from a herd in the low TB area = 61,000
- Number of moves per CPH every two months = 5,905
- Cost of low TB area pre-movement testing = £457,500 (61,000 x £7.50)

[1] Cattle moved from the intermediate and high TB areas of Wales and the Edge and high risk area of England.

[2] Based on the basic hourly wage set out by the Agricultural Wages Order and also includes 30% non-wage labour cost.

- Call out fees for pre-movement testing in the low TB area = £257,812 (5,905 x £47.66)
- Cost of labour (at 10 cattle tested per batch) = £115,148 (£19.50 x 5,905)
- Total cost reduction = £830,460

The affect of these policies will vary based on the circumstances of each farm. If movement patterns remain the same, as a whole, they will result in a recurrent financial saving to the industry of £523,629

Please note that these cost estimates do not take into account that some moves will be covered by a Government-funded surveillance test, which is carried out on each herd annually, and some moves are exempt from the PrMT requirements and similar exemptions will be available for the PoMT requirements. If this option meets its intended aims there will also be the indirect benefits which are difficult to estimate:

- (assuming movement patterns change) reducing disease control costs to farm businesses and the taxpayer by preventing the disease being brought in to the areas
- (assuming movement patterns remain the same) reducing disease control costs to farm businesses and the taxpayer through finding disease earlier.

Disease costs to the farm business include productivity impact, herd restrictions and economic loss of cattle. Disease control costs to the taxpayer include vet fees, compensation and administration. This option needs to reduce the number of new breakdowns in the area by an average of one a year to achieve the objective of at least 99.9% of herds being TB-free.

Option 3

This option would have an additional one-off cost to the Welsh Government to establish monitoring. Based on the evidence that the majority of the few breakdowns in the low TB area are the result of infection brought in through purchased cattle and, assuming a high level of compliance, this option is aimed at directly addressing this risk. It is therefore likely to have the best disease control benefits and therefore most likely to achieve the objectives.

The negative impacts highlighted by the respondents to the consultation are likely to be more severe under this option, for example the detrimental impact on trade from the High TB Areas. This will likely have a higher impact on farm business in the Higher TB areas as they would have a severely limited market to sell to. For example, our analysis of Low TB area cattle movements in 2015 shows that whilst 70% of moves on to Low TB area holdings originate from holdings in a low TB area and around 30% of moves originate from a higher TB area. There may also be an indirect cost from them no longer able to source certain types of cattle which will also impede genetic improvement.

Summary

The financial impact of all options may be relative to the size of the business however it will be more dependant on the type of business and where cattle are traded.

Because option 1 is highly unlikely to help achieve the objective it is not considered to be a viable option. By not addressing the disease control priorities for the low TB area it risks the disease situation deteriorating. Option 2 addresses the disease control priorities and is likely to be sufficient for the objective to be met. Whilst option 3 is most likely to meet the objectives because it directly addresses the disease control priorities, it also likely to have a negative financial impact because of the inability to trade as highlighted by the respondents to the consultation. Option 2 is therefore the preferred option.

2. CLEARING TEST

The disease control priority for herds in all the areas is to protect them from TB being introduced through cattle movements and to increase assurance that herds contain no infected cattle when TB restrictions to enable free trade are removed. Despite repeated skin testing in some herds, at standard and even severe interpretation, is not detecting all animals infected with TB. If an undisclosed infected animal remains in the herd and TB restrictions are lifted it poses a risk of the disease spreading within the herd and to other herds through the movement of the undetected infected animal.

Herds with a history of TB are around four times more likely to have a new incident than herds with no history of the disease. Whilst it is difficult to quantify how much of this increased risk is due to re-infection and how much is due to disease persisting we have identified infected cattle that have tested clear to a skin test prior to movement as a cause of a new herd breakdown in incidents where the TB genotype, isolated from cultures from samples from a reactor animal, has a home range which matches the location of the animal prior to movement. Research and the final report of the Independent Scientific Group on Cattle TB provides additional support for a conclusion that, despite the existing measures in place, for releasing herds from restrictions, for testing cattle prior to movement (except in low risk areas) and for routine surveillance testing, infected cattle are likely to make a significant contribution to the spread of TB between herds in GB.

Options

Option 1: Do nothing.

This represents no change to the existing policy.

Option 2: Chronic herds

The latest data show that, of all the breakdowns that were closed in 2014 in Wales, 35% entailed a recurrence within two years. This is important because, whilst it may mean that the herd has been re-infected again from a new source,

in some cases it may be because the disease was not fully eliminated when restrictions were removed. Repeated skin testing in some herds, at standard and even severe interpretation, is thought not to detect all animals infected with TB in the herd. In herds where reactors are detected at the first check test (at six months following the end of a breakdown) undisclosed infection is suspected when there is evidence of previous reactions to bovine tuberculin in the testing history (from the previous breakdown) of a reactor animal.

The recurrence rate varies across the regions:

- Low: 0%
- Intermediate (mid): 21%
- Intermediate (north): 27%
- High (east): 35%
- High (west): 43%

Recurrence also varies depending on the type and size of the herd. For example, dairy herds across all of Wales are substantially more likely than beef herds to have a recurring breakdown within two years (47% vs 26%). There is also a significant effect of herd size, with recurrence rates much higher in large herds than in small herds:

Herd size	Proportion reoccur
0-10	5%
11-50	9%
51-100	20%
101-200	36%
201-300	45%
300+	55%

These characteristics (dairy, large herd size, high TB areas) correspond to herds in Wales that are typically under restrictions the longest. Although it can be difficult, for any single persistent herd, to tease out all of the different contributing factors likely to be responsible for the extended duration of the breakdown, veterinary opinion is that undisclosed infection may in many cases be playing a significant role.

To help achieve the objective, we intend to introduce a further policy with an aim of minimising the risk of TB spreading through the movement of cattle from chronic[3] TB breakdowns – those herds that may have come off restrictions prematurely i.e. before all infected cattle have been identified and removed.

The policy, which will apply to any herd that is classified as a chronic TB breakdown in an intermediate or high area, will be:

[3] Has been OTFW for a duration of 18 months or longer or became OTFW at or before the second check test following an earlier OTFW breakdown, excluding those recurrent breakdowns where all reactors are animals bought in since the close of the previous incident, unless subsequent molecular typing information does not support a purchased origin.

i. The final Short Interval Test (SIT), which normally allows a herd to come off restrictions and trade freely, will not be able to be used as a pre-movement test to enable a movement of cattle to an OTF herd or to an unrestricted market.
ii. This will be achieved by preventing animals from moving off to another OTF herd, or market, from a chronic breakdown until they have undergone a PrMT, at the farmer's expense, at least 60 days after the SIT which enabled herd restrictions to be lifted, with a clear result.
iii. This will still enable the following during this period, with no requirement for licensing:

    - the purchase of cattle in to the herd
    - animals to be sent directly to slaughter, a slaughter market or AFU where conditions of approval allow.

iv. If a PrMT identifies reactor animals, herd TB restrictions will be reinstated.

The herd will be free from restrictions and will therefore be able to purchase animals and, additionally, will be able to move cattle:

- direct to slaughter
- to slaughter via a dedicated slaughter gathering or an Approved Finishing Unit
- under 42 days old as TB-free.

The benefits of this approach are:

- it is targeted at those higher risk herds that are most likely to come off restrictions prematurely, as opposed to targeting all herds
- herds will be free to purchase animals and will be free from other restrictions.

Option 3: All herds

An alternative option to the targeted approach is to apply the policy to all breakdowns in the intermediate and high TB areas, regardless of the length of time under restrictions or if the breakdown was recurring (considered as Option 3). The policy will not apply to herds in the low TB area. This approach may have potentially greater disease control benefits.

Costs & benefits

Option 1: Do nothing

There is no change to the existing policy, and hence there is no additional cost or benefits with this option.

Option 2: Chronic herds

There will be a one off cost to the Welsh Government to establish a system of monitoring compliance which has been estimated by APHA as £5,000. There will be a one off cost (for each relevant occurrence) to the farmer of keeping those cattle, that would otherwise be traded for 60 days as well as the costs associated with testing. This will impact each herd differently and will depend on a number of factors such as the size of the herd, time of year, capacity for keeping the animals for an extended period as well as how many, if any, would have been traded in the 60 day period.

Below are illustrative estimated cost for three potential different batch sizes of cattle using typical testing costs of £7.50 per animal tested with a fee of £47.66, cost of keeping an animal at £1.30 per day for 60 days and labour cost of £9.50/hour (assuming two people, 20 cattle tested per hour on two separate days):

Cattle	Testing	Labour	Daily cost	Total
10	£122.66	£19.00	£780	£921.66
25	£235.16	£47.50	£1,950	£2,232.66
50	£422.66	£95.00	£3,900	£4,417.66

In terms of the likely impact on the industry, in 2016 there were 918 breakdowns which ended outside the low TB area of which 361 were classified as chronic. The ongoing annual cost based on the scales above would be:

Cattle batch	Batch cost	Breakdowns	Total cost
10	£921.66	361	£332,719.26
25	£2,232.66	361	£805,990.26
50	£4,417.66	361	£1,594,775.26

Such additional costs would need to be assessed against the expected disease control benefits. The estimated cost of a new breakdown to a farmer is £8,000 with £24,000 to the taxpayer (£34,000 total). For there to be a financial benefit the policy will need to prevent the following number of breakdowns per year:

Cattle batch	Cost	Breakdowns prevented	Cost of breakdowns prevented
10	£332,719.26	10	£340,000
25	£805,990.26	24	£816,000
50	£1,594,775.26	47	£1,598,000

Option 3: All herds

The costs per herd will be the same as for option 2 (i.e. related to the number of relevant cattle) except that such costs will apply to more herds. In 2016, 918 breakdowns ended outside the low TB area. The ongoing annual cost based on the scales above would be:

Cattle batch	Batch cost	Breakdowns	Total cost

10	£921.66	918	£846,083.88
25	£2,232.66	918	£2,049,581.88
50	£4,417.66	918	£4,055,411.88

The disease control benefits, and therefore costs savings, may also be expected to be greater although it is anticipated that the gains from this policy will also include significantly more negative impacts because a greater number of herds would be affected than in option 2. For there to be a financial benefit the policy will need to prevent the following number of breakdowns per year:

Cattle batch	Cost	Breakdowns prevented	Cost of breakdowns prevented
10	£846,083.88	25	£850,000
25	£2,049,581.88	61	£2,074,000
50	£4,055,411.88	120	£4,080,000

Summary

The preferred policy is for the clearing test not to be able to be used as a pre-movement test for herds that are classified as having suffered a chronic TB breakdown. The policy is the most cost effective as it most likely strikes the best balance between disease control and limiting the negative financial impacts on individual herds and the industry.

3. COMPENSATION CAP

Options

The policy objectives for the TB valuation system are:

1. a valuation system that is sustainable, promotes good practice and contributes to the eradication of TB
2. where market value is paid, a clear, transparent system that does not over or under-compensate
3. a system that penalises cattle keepers that have not complied with the rules of the TB Order
4. compensation that is fair to the taxpayer and cattle keepers whilst meeting the Welsh Government's legal obligation to pay compensation for cattle slaughtered because of TB

Option 1: Do Nothing - No change to existing policy

Since 1998 compensation for all cattle slaughtered because of TB is determined by individual on-farm valuation. Valuations of cattle are currently undertaken by contracted valuers who were successful in tendering for the TB Valuation Services Framework, which runs from 1 May 2016 until 30 April 2020. Farmers are generally in favour of this system because the valuation takes in to account all the attributes of each animal such as breed, age and sex. The process for valuation and paying compensation includes:

1. An animal is identified and required to be slaughtered because of TB (most commonly because it has tested positive to one of the TB tests).
2. The Animal and Plant Health Agency (APHA) appoints a valuer from the framework to determine the market value of the animal. Valuers are selected on a rota basis.
3. The owner of the animal can only reject the appointment of the valuer if there is a personal or business conflict of interest. Where we agree there is a genuine conflict of interest another valuer from the framework is selected.
4. The selected valuer visits the farm to value the animal(s) based on current market values. The animal's owner can provide any necessary information/evidence to the valuer for it to be taken into consideration when coming to its value.
5. (If applicable) the valuer provides a justification (including pictures and other evidence) of the animal's valuation.
6. Compensation is paid taking in to account any reduction necessary in line with the rules set out in the TB Order. The owner of the animal is able to appeal against the decision to reduce compensation but not the valuation.
7. We receive a salvage value for the animal. If compensation payment has been delayed, to determine if the salvage value is higher than the market value, it is now paid.
8. Where there is a justification it is higher than the market value it is scrutinised by the Monitor Valuers.

Because of the subjectivity inherent in an individual animal valuation system, there is a risk of overvaluation of individual animals. Overvaluation has significant adverse affects for the TB Eradication Programme:

- it increases the cost to the taxpayer

- it offers little incentive for farmers to make an effort to prevent TB, which is likely to result in more animals becoming infected

- it could lead to the development of a secondary market for animals affected by TB which could result in more animals being slaughtered.

It is therefore important both for disease control purposes and financial reasons to prevent overvaluation or, if this is not possible, to keep it to a minimum.
In 2003 the Auditor General for Wales produced a report on compensating farmers for Bovine TB in Wales. The Auditor General estimated that in 2002 compensation was at least 50% higher than the underlying market prices for both commercial and pedigree animals. The report found that a number of factors could lead to inflationary 'valuation creep' compared with underlying market values and add to the pressure on those valuing animals. It also found that there were inflationary pressures inherent in the valuation arrangements which had led to the development of a secondary market for animals affected by TB.

One of the primary changes made to address the concerns highlighted in the National Audit Office Wales report was the appointment of three 'Monitor Valuers' in 2007. Along with this a series of other measures were also introduced, including:

- A revised list of valuers.
- A requirement for automatic justification of valuations above certain levels. Originally these were £2,000 for commercial cattle and £5,000 for pedigree cattle but were subsequently changed to £1,800 and £4,000 respectively in 2009.
- Evidence, including photographs, is required for cattle valued above these thresholds. These valuations are scrutinised by the Monitor Valuers on a monthly basis.

The Monitor Valuers consist of a group of three expert livestock valuers. Their role is to monitor and scrutinise valuations with the aim of ensuring consistency and compatibility with market prices. The Monitor Valuers meet once a month to examine all valuations, seeking additional justification as necessary. Although the Monitor Valuers do not have the power to adjust any valuations they can:

- query any value deemed not to be in line with market value and request justification / further information
- 'park' valuers, temporarily preventing them from undertaking any further valuations, if they have not received satisfactory justification of a valuation
- monitor warranted valuers by accompanying them on valuation visits
- monitor valuations by attending abattoirs to assess animals prior to slaughter.

In addition, the Monitor Valuers provide guidance and support to valuers and advise us on valuation issues. Where the Monitor Valuers consider justifications are not valid there is a process in place to remove valuers from the framework.

The Tuberculosis (Wales) Order 2010, which came in to force in May 2010, first linked the responsibilities of cattle keepers and compensation. Compensation payments to cattle keepers could be reduced if they did not adhere to the regulations, did not follow advice provided in Veterinary Improvement Notices or if they allowed their TB test to become overdue. A number of changes were also introduced around April 2016 when the Tuberculosis (Wales) (Amendment) Order 2016 came in to force. These included:

- Lowering the threshold to which warranted valuers have to justify the valuations of pedigree cattle to £3,000 (from £4,000) – this allows the Monitor Valuers to scrutinise a greater number of the higher value valuations.

- Formally procuring the warranted valuers (who carry out the valuations) under a framework contract – this provides us with a formal procedure to suspend or remove valuers and allows us to monitor them and scrutinise

their valuations more rigorously.

- Introducing a cap of £15,000 per animal on compensation payments for cattle – this limits the maximum amount we pay in compensation.

- Amending the Order to expand and tighten the rules governing the amount of compensation a cattle keeper can receive for any animal slaughtered for TB – this significantly increased the circumstances by which compensation can be reduced.

These changes introduced in 2016, which aim to ensure the TB valuations system better meets the policy objectives, have not been in place for a sufficient amount of time to fully appraise their impact.

Despite the measures we have in place, overcompensation may still be occurring, especially as valuers are likely to come under pressure to value animals as high as possible.

There are also other weaknesses in the current system. Because it is impractical to scrutinise all valuations (currently around 800 a month) less scrutiny is given to the valuations below the thresholds which may lead to overvaluation. As well as this, the animal's owner can provide any necessary information to the valuer for it to be taken into consideration when coming to its value. For example, pregnant animals usually achieve higher market values. We are carrying out data collection of animals which are said to be in calf and the initial findings are in 42% of cases which were said to be three or more months in calf were found not to be. The data collection will continue for twelve months (until June 2017) but the initial findings suggest many animals said to be in calf are being overvalued.

Whilst any gap between average market values and TB valuations may be interpreted as a reflection of widespread overvaluations, it is important to note the sales and compensation data may not be directly comparable. We are regularly told by industry representatives it is rare to find the best cattle sold at markets. This is because herd owners keep their better cattle within their herd for breeding and production. This means we would expect higher value cattle to be kept on farm, for example for milking and breeding, rather than being included in the known market sales data. If these observations are correct then there will be a tendency, for any particular type of breeding animal, for the average TB payment to be higher than the average known sales value for the class of animal. This could at least partially explain why valuation levels remain higher than market prices and why the gap is higher for pedigree cattle compared with commercial cattle. It would be informative to gather evidence to determine if this is influencing the observed difference between valuations and market values. We will gather further evidence on this to analyse alternative compensation approaches taking in to account those used in other countries

There are around 60 herds currently under restrictions for 18 months or longer, with some herds under restrictions for longer than 10 years. This suggests due to ongoing income from milk and selling beef animals, along with compensation payments, these farms are able to function profitably despite being under

restrictions. In some (rare) cases, where overvaluation is occurring, there may also be a net gain to the farm business associated with their breakdown. A study carried out by the University of Reading found that, after compensation payments have been taken into account, 20% of dairy farms and 35% of beef farms appear to have a net gain associated with their breakdown. We also have evidence of a number of herds where anomalous reactions have been found i.e. owners may have interfered with the TB test to create the impression the animals are infected when they are not. This suggests the owners would profit from the animals being identified as reactors rather than being sold on the open market when the herd regains its TB-free status. If possible, any system should aim to address both these issues which are not exclusive to Wales and also present in England.

Option 2: Cap of £5,000

Since 1 April 2016 a cap of £15,000 per animal on compensation payments has been in place. Compensation is either the market value or the cap, whichever is lower. The purpose of the cap is to protect the Welsh Government from the cost of compensation for the highest value animals. One of the reasons for this is, unlike commercial cattle, very few high value animals are sold in the market and so their valuations become more subjective as there is very little sales data available to use as a comparable valuation.

The number of animals currently affected by a cap is small, as is the saving in compensation. In the financial year 2015/16 one animal was valued above £15,000 (at £20,000). Below is the breakdown of the likely savings and animals affected for a cap of £10,000, £7,500 and £5,000. This shows the sum of differences of individual payments versus the cap:

Valuation	**No. animals**	**Total cost**	**Implied saving to compensation payments if cap was in effect**
>£15,000	1	£20,000	£5,000
>£10,000	8	£113,500	£33,500
>£7,500	41	£407,050	£99,550
>£5,000	95	£760,300	£285,300

Those farmers whose animals are worth more than the cap will receive lower compensation payments (from the Welsh Government) than would otherwise have been received equivalent to the difference between the individual valuation of their animal and the cap (discounting any potential consequential loss/saving).

Although this is an immature market for providers, owners of high value animals can explore the possibility of insuring their animals to cover any value which is in excess of £15,000. The cost of the insurance will vary in line with the likely risk, as is the case for other insurance cover, and therefore the practicality and cost will depend on the individual circumstances of each farmer.
The current cap of £15,000 is an arbitrary figure, although based on some feedback from industry representatives and the monitor valuers. Selecting an alternative lower cap would continue to mostly be an arbitrary process. Should

the cap be lowered justifications would be required to, as far as possible, prevent valuation creep to and above the cap.

Costs & benefits

Option 1

This option would retain the existing arrangements.

Objective 1: A valuation system which is sustainable, promotes good practice and contributes to the eradication of TB.

- In the financial year 2015/16, total valuer costs were £363,923 compared to the forecasted cost of £350,000.
- In the financial year 2015/16, total compensation paid was £14,480,615. Although this reduced to £12,485,299 when taking in to account other costs and receipts, it is above the budgeted forecast of £9,860,000.
- Due to ongoing compensation payments, the majority of which are at 100% market value, along with other income there is little incentive for some cattle keepers to take action to eliminate TB from within their herd when under restrictions, especially when overvaluation occurs.

Objective 2: Where market value is paid, a system which does not over or under-compensate.

- The individual valuation system operates on the basis it is the most suitable way of ascertaining an animal's market value because the animals are valued based on their individual attributes.
- Due the subjective nature of an individual valuation there is potential for both undervaluation and overvaluation to occur. Due to the pressure to valuate animal as high as justifiable it is more likely overvaluation rather than undervaluation will occur.
- There remains a gap between valuations and average market values. Whilst it may not be possible for valuation levels and market values to be the same there is some evidence, such as anomalous reactions, overvaluation is likely to be occurring.

Objective 3: A system which penalises cattle keepers which have not complied with the rules of the TB Order.

- The TB Order includes rules which can affect the amount of compensation a cattle keeper can receive for any animal slaughtered for TB. If the rules have not been followed the amount of compensation may be reduced by up to 95%. There ought to be a suitable mechanism in place to fully implement these powers.

Objective 4: Compensation which is fair to the taxpayer and cattle keepers whilst meeting the Welsh Government's legal obligation to pay compensation for cattle slaughtered because of TB.

- Bought-in cattle are a source of TB infection and the majority of compensation paid is at 100% market value. There is therefore little incentive for some cattle keepers to take greater responsibility for managing this risk, especially when overvaluation occurs.
- Compensation is at 50% of the market value for animals bought in to a herd whilst it is under restrictions and therefore the farmers share the financial risk of bringing healthy animals in to a herd with a known TB problem.
- The Welsh Government meets its legal obligation because the salvage value of the animal is paid as a minimum, including where this is more than the market value.

<u>Option 2</u>

Objective 1: A valuation system which is sustainable, promotes good practice and contributes to the eradication of TB.

- Lowering the cap will have no affect on the valuers cost as valuations will continue to take place
- Lowering the cap would go some way to making the valuation system more financially sustainable. If the cap had been £5,000 in the financial year 2015/16 a saving of just under £280,300 would have been made and it would have affected less than one hundred animals.
- This option partly addresses the issue of incentivising cattle keepers to take action to eliminate TB from within their herd but only those herds which have animals which are valued above the cap.

Objective 2: Where market value is paid, a system which does not over or under-compensate.

- Owners of higher value animals are more likely to be under-compensated whereas owners of animals below the cap will not be affected.
- A cap prevents overvaluation for those animals whose market value is above the cap but does not address overvaluation more generally.
- Valuation justifications are necessary to prevent valuation creep i.e. those animals whose market value is below the cap being overvalued to and above the cap.

Objective 3: A system which penalises cattle keepers which have not complied with the rules of the TB Order

- This system can continue to allow for compensation to be reduced if the rules have not been followed. However, the cap may negate some of its financial impact and therefore some of its ability to drive behaviour.

Objective 4: Compensation which is fair to the taxpayer and cattle keepers whilst meeting the Welsh Government's legal obligation to pay compensation for cattle slaughtered because of TB.

- Those farmers whose animals are worth more than the cap will share the financial risk.
- As long as the salvage value of the animal is paid as a minimum, including where this is more than the cap, the Welsh Government will meet its legal obligation.

Summary

It is important for disease control purposes and financial reasons to aim to prevent overvaluation. Farmers are generally in favour of the current system because the valuation takes in to account all the attributes of each animal. However, because of the subjectivity inherent in an individual animal valuation system and despite the measures we have in place, overcompensation may still be occurring. The current system has been improved due to the measures introduced and it meets many of the objectives but with our average compensation payments 60% higher when compared to payments for comparable animals in England there remain issues and weaknesses that should be addressed. As well as this a loss of European funding means that it is even more important that compensations costs reflect the true market value:

Year	Compensation paid	Valuation Haulage Slaughter Disposal	Salvage received	EU Income received	EU Income as % of Total Expenditure
2011/12	£13,284,000	£826,000	-£1,540,000	-£3,220,000	10.98%
2012/13	£17,024,000	£835,000	-£2,020,000	-£3,910,000	11.93%
2013/14	£11,761,000	£619,000	-£1,462,000	-£3,190,000	13.42%
2014/15	£10,905,000	£712,000	-£2,521,000	-£2,610,000	12.14%
2015/16	£14,480,000	£850,000	-£2,846,000	-£3,990,000	15.11%

Doing nothing is therefore not a viable option as it is not financially sustainable and does not meet all of the policy objectives.

A lower cap is a simple solution aimed at preventing overvaluation of the highest value cattle – those where, because of the subjective nature of the system, overvaluation may be more likely to occur. Reducing the cap to £5,000 will also make sure the compensation system is more financially sustainable. In the longer-term alternative approaches, in isolation or in combination, may better meet the objectives and are therefore worthwhile exploring further. We

will gather further evidence and analyse alternative compensation approaches taking in to account those used in other countries.

Consultation

A twelve week consultation was launched on 18 October 2016 and closed for responses on 10 January 2017. The consultation set out a number of proposals to be included in a refreshed TB Eradication Programme and sought views on establishing a regional approach to tailor different control and prevention measures. The consultation attracted 993 representations from a variety of sectors including the farming industry, veterinary profession, livestock auctioneers, wildlife interests and members of the general public. 431 representations were petition like responses (constituting four different petitions). Below is a summary of the issued raised by respondents in relation to the proposals outlined in this RIA.

Post-Movement Test

As part of the consultation on the refreshed programme we consulted on the following proposals aimed at finding disease at the earliest opportunity in the low and intermediate areas:

- cattle moved in to the low TB area from a higher disease area will require a PoMT
- cattle moved in to an intermediate area from a higher or similar, but geographically separate, disease risk area will require a PoMT.

Whilst some respondent to the consultation believed that PoMT was unnecessary, as cattle would as these cattle will been pre-movement tested at least 60 days beforehand, others agreed that PoMT should be carried out. The reasons given were because it would increase the likelihood infection being found, help reduce the disease being introduced and help raise awareness of purchasing cattle from higher risk areas.

Below is a list of the issues raised and changes made to the policy (if applicable):

Issue raised	Response
Cattle should be suitably quarantined while they are awaiting their test and results.	Whilst this is desirable from a disease control perspective it is very difficult to enforce and may lead to an (incorrect) expectation that restrictions would only apply to the quarantined animal(s) if test positive. Instead, farmers will be encouraged to isolate the cattle from the rest of the herd (before the PoMT has been carried out) to reduce the risk of disease spreading.
The interferon-gamma test could be	Only a skin test at standard

used as the PoMT.	interpretation can be used to restrict a herd.
PoMT could have a detrimental impact on trade from the High TB Areas. Low TB Area farmers may not wish to buy from higher TB Areas due to the PoMT requirement. Exemptions could be given from PoMT if movements were from a lower risk herd within a higher TB area.	An exemption will be included for animals that move from a herd in a high TB area that is a participant of a CHeCS TB health scheme and are certified as risk level 10 (lowest risk).
Some raised concern about the potential impact on beef finishers in the Low TB Area who would have increased costs and practical difficulties in testing batches of animals on a more frequent basis. It was suggested that these herds could be tested at 6 monthly intervals instead.	We will include an exemption for a Licensed Finishing Unit (LFU). An LFU is a facility which provides a route for cattle producers to finish animals, sourced from TB-free herds, in biosecure housed units. Cattle in LFUs will be exempt from post-movement testing because they are instead subject to six monthly testing, strict biosecurity rules, are permanently housed and can only be sent directly to slaughter. LFUs are already in place in England and share many of the conditions, however, no surveillance testing is carried out on these units.

Please note that the impact of these accepted changes resulting from the consultation responses have been incorporated in to the assessment of the options.

Pre-Movement Test

This proposal incited many comments. Whilst some supported the removal of the PrMT requirement, most respondents disagreed with the removal due to the fact that there are still herd breakdowns occurring in the area and the feeling that it is too soon to remove the requirement. The majority, if not all, of TB breakdowns in the area are the result of undetected infection brought in through cattle movements from other areas. It is therefore proportionate to remove the PrMT requirement for cattle movements from and within the Low TB Area and replace it with the PoMT requirements. Farmers are of course, still able to PrMT their cattle if they so wish.

Clearing test

We consulted on the clearing test (which lifts TB movement restrictions from a herd) not being able to be used as a PrMT in the high TB area. Very many respondents disagreed with the proposal for a number of reasons. Some felt not allowing the clearing test to be used as a PrMT gives a longer period for cattle to be deemed TB Free so reducing likelihood of onward transmission;

however, it undermines the validity of the skin test. Some felt that the measure was excessive for farms with little history of TB and it would be better used on a targeted basis. A general theme arising from respondents was the additional hardship this proposal would cause farmers and the additional time they would need to wait after restrictions were lifted in order to sell their stock.

If cattle were to undergo an additional test after movement restrictions were lifted it will increase the opportunity to identify previously undisclosed infection before the animals were allowed to move off the farm. To ensure that animals cannot be moved off a farm subject to TB movement restrictions immediately after the clearing test will result in animals remaining on the farm for 60 days or more. Given the responses to the consultation this will be taken forward in chronic TB breakdown herds only and the results will be monitored.

Compensation cap of £5,000

There were mixed views received on introducing a compensation cap of £5,000 per animal. Some agreed with the proposed cap in order to make the compensation element of the Programme more financially sustainable and fairer to all involved. It was also felt by some that lowering the compensation cap would stop farmers abusing the system and those few who are profiting from TB. Many farmers agreed with the cap and made the point that a table valuations system would be the undesirable alternative.

Very many respondents made the point that it is likely to impact on high genetic value animals, stating that a cap does not encourage investment in high quality bulls and the stock will decrease in value. Some felt that the cap as it currently stands (£15,000) is acceptable and some felt a cap of £10,000 is appropriate and some felt it should be further reduced to £3,000. Others suggested that a cap of £2,500 for commercial cattle and £10,000 for pedigree stock would be the best option as it would not deter breeders from investing in top quality stock, not would it reduce the standards of Welsh cattle. Many felt that there must be provision within the current valuations systems to provide appropriate compensation levels for animals of exceptional merit and pedigree.

Some respondents felt that it would be better to further link compensation levels with behavioural changes and compliance with testing, isolation, biosecurity and informed purchasing. Others favoured making improvements to the current valuation system rather than imposing a cap.

A general theme from respondents to this point was that obtaining insurance is unrealistic and there is concern, if insurance was available, farmers could not afford the premiums, particularly in High TB Areas or if they have had history of disease. However, as is usual practice for insurance higher costs reflect higher risks.

Competition Assessment

No competition effects are anticipated for any of the proposals there is no risk of a significant detrimental effect on competition and there are no anticipated

significant benefits for competition.

Post implementation review

The impact of this legislation will be reviewed on an annual basis to determine if it is having the intended effect on the overall objective as well as each policies aims. This will include a review after three years after the coming in to force to establish the actual costs and benefits and whether it is achieving its desired effects.