Eradication programme for Bovine tuberculosis

United Kingdom

This programme has been approved by the Commission, from the technical and financial point of view, only for the year 2015.



Standard requirements for the submission of programme for eradication, control and monitoring PROGRAMME for ERADICATION: ANNEX I

Member States seeking a financial contribution from the Union for national programmes for the eradication, control and monitoring of animal diseases and zoonosis listed below, shall submit applications containing at least the information set out in this form.

Bovine brucellosis, bovine tuberculosis, ovine and caprine brucellosis (B. melitensis), bluetongue in endemic or high risk areas, african swine fever, swine vescicular disease, classical swine fever, rabies.

The central data base keeps all submissions. However only the information in the last submission is shown when viewing and used when processing the data.

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- 6) For simplification purposes you are invited to submit multi annual programmes
- 7) As mentioned during the Plenary Task Force of 28/2/2014, you are invited to submit your programmes in English.

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Submission date

Submission number 1410969728869-3749



1. Identification of the programme

Member state :	UNITED KINGDOM		
Disease	Bovine tuberculosis		
Species :	Bovines		
This program is multi annual	:yes		
Type of submission	: New multiannual programme		
Request of Union co-financing from beginning of :	2015	To end of	2020

1.1 Contact

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2. Historical data on the epidemiological evolution of the disease

Provide a concise description on the target population (species, number of herds and animals present and under the programme), the main measures (sampling and testing regimes, eradication measures applied, qualification of herds and animals, vaccination schemes) and the main results (incidents, prevalence, qualification of herds and animals). The information is given for distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables (point 6), complemented by graphs or maps (to be attached).

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- 1. The efforts to eradicate bovine TB (bTB) from the UK (Great Britain (GB) and Northern Ireland (NI) predate the first legal initiatives in this area at European Community level and were initially driven by public health concerns and the desire to increase the productivity and welfare of the national cattle herd. Detailed background information of the schemes in place in the UK since 1949 has been submitted in previous Programmes.
- 2. The eradication schemes met with initial success in the three decades leading up to 1979, when the prevalence in GB declined steadily to 0.018% of all cattle tested and most counties were virtually disease-free. However, this progress stalled by the 1980s, with bTB incidence in the Southwest of England remaining about three times higher than elsewhere in the country despite the annual testing of herds in that area. In the 1970s, the Eurasian badger (Meles meles) had been identified as a potential reservoir of infection for cattle in the SW of England. Nowadays, bovine TB is probably the most serious disease affecting the cattle industry in England, Wales and NI. Current annual spend on bTB controls in GB and NI is around £160 million (around £100m for England, £30m for Wales and £30m for NI), of which compensation and testing costs make up the largest share.
- 3. In 2009, Scotland was designated an officially TB free (OTF) region of the UK (Commission Decision 2009/761/EC). To further protect the OTF status of Scotland, additional TB testing requirements are in place for cattle over 42 days of age moving to Scotlish holdings from herds in the high TB incidence areas of England and Wales (and from animals moved from the low TB risk areas of England that had spent part of their lives in a high risk area). Scotland is therefore not covered by this Programme. Current epidemiological situation in England
- 4. The key headline statistics for bTB in England over the period 2008-2013 have been summarised in Tables 2a and 2b below. These show that:

- The number of cattle herds registered in England has been falling year on year from 58,465 in 2008 to 53,676 in 2013;
- The number of herds checked and number of tests in OTF herds (representing the bTB testing coverage or effort) have steadily increased year on year, mainly as a result of the rollout of annual testing across the West of England and the Midlands;
- Herds not OTF at some point in the year due to a TB breakdown (total positive herds) has gradually gone up from 5,970 in 2008 to 7,245 in 2013.
- The annual number of new bTB breakdowns (new positive herds) has fluctuated over the period, with a peak in 2012 (3,925) followed by a reduction last year (down to 3,868), although those are still more breakdowns than those reported in 2008 (3,765) (Figure 1).
- Following a peak in 2008, there have been marked reductions in annual herd incidence rate of bTB in England over the six year period to 2013. This was true whether the herd incidence was expressed as the percentage of new positive herds (7.9% to 6.0%), as a percentage of tests carried out in OTF herds that identified a new TB breakdown (9.8% to 7.3%). or the percentage of tests in OTF herds that resulted in a new TB breakdown with OTF status withdrawn (6.4% to 5.3%) (Figure 3). However, these reductions in herd incidence were partly due to the adoption of more frequent (annual) TB testing in counties at the edge of the high risk area that were formerly on 2, 3 and 4-yearly testing intervals and where the prevalence of cattle infection (and thus the probability of a positive herd result) is lower than in the core endemic bTB (high risk) area.
- Herd prevalence fell from 12.6% in 2008 to 11.3% in 2013.
- In line with the steady increases in herd testing coverage, the number of TB tests on animals in England also went up year-on-year (just over 4.5 million in 2008 to nearly 6.3 million in 2013).
- Animals slaughtered by APHA as TB test reactors to the tuberculin skin test or the interferon-gamma blood test in 2013 was 25,747, compared to 26,392 in 2008.
- Animal-level incidence also fell steadily in England from 0.58 TB reactors detected for every 100 tests carried out in 2008 down to 0.41 reactors per 100 in 2013 (Figure 2).
- There was no clear trend in the number of additional non-reactor animals that were removed as direct contacts.
- A total of 1,073 culture-positive cases of bTB were initially identified during post-mortem meat inspection of cattle carcases at routine slaughter ("slaughterhouse cases") in 2013, compared to 704 in 2008 and 1,088 in 2012.
- 5. Overall, these descriptive statistics point to a gradual stabilisation of the main bTB incidence and prevalence indicators in England over the last few years, even though the greater testing effort has resulted in more positive herds being detected (at least until 2012). It is premature to reach any conclusions on the factors at work in these reductions, including the impact of any particular TB surveillance of control measure introduced in recent years. To draw more meaningful conclusions, we need to look at longer term trends and see whether the reductions achieved in 2013 can be sustained in the following years.

Current epidemiological situation in Wales*

6. The number of new bovine TB herd breakdowns in Wales peaked during 2008 and 2009 with a total of 1,198 and 1,186 new breakdowns recorded separately in both years. This was followed by a fall of 147 and 141 cases in the number of new breakdowns in 2010 and 2011 respectively when compared to 2009. However, the number of new breakdowns recorded in 2012 increased marginally to 1,113 cases which were higher than the two previous years but 2013 witnessed the lowest number of new breakdowns so far recorded since 2008 with only 871 cases overall. Similarly, the 2014 new breakdown figures were the lowest ever recorded in any consecutive month between February and June since 2008, with only 445 cases so far recorded from January to date.

- 7. The number of new breakdowns varies greatly from month to month; this variation is due to a number of reasons including the seasonal aspect of TB testing, as more testing takes place during the winter months than the summer, the impact of unusual weather and the number of test reading days in a month. Therefore due to the high degree of monthly variations, care needs to be taken not to read too much into the figures for short periods of time. Between 2008 and 2013 the overall year-on -year average decline in the number of new herd breakdowns is around 12%. Over the same 5 year period the average decline in herd prevalence is 7%, while the average decline in the animal prevalence per 100 tests is 14%.
- The total number of herds which had their Officially TB Free status Withdrawn (OTFW) due to confirmation of disease in Jan-Dec 2013 was 440 compared with 567 for the same period in 2012 which represents a 22% reduction between both years when compared. There have been 229 OTFW breakdowns from January 2014 to date. There are however, circumstances where OTFW status is applied to herd without M. bovis confirmation at post mortem examination or bacteriological culture due to epidemiological reasons. Such OTFW breakdowns are excluded from these statistics.
- Number of bTB tests carried out in 2013 was 17,082 in Officially TB Free herds (OTF) (20,079 on all herds), compared with 19,041 (22,212 on all herds) for the same period in 2012. There have been 9,518 tests so far on OTF herds in 2014 with 10,795 tests on all herds from January to date.
- A total of 1,177 cattle herds in Wales were under movement restrictions at the end of 2013 due to a TB incident or overdue TB test, representing 9% of all herds in the country (12,641) at the end of the year. 1,638 herds were under movement restrictions at the end of 2012 due to a TB breakdown representing (about 13% of all herds). There were 1,051 herds under movement restriction at the end of June 2014.
- The number of animals slaughtered in Wales as TB test reactors to the tuberculin skin test or the interferon-gamma blood test during 2013 was 5,883 compared with 8,901 for the same period in 2012. 3,440 cattle have so far been slaughtered under the TB Eradication Programme between January and June 2014 out of which 3,201 were TB reactors.
- In 2013, an additional 219 animals were removed as direct contacts or as inconclusive reactors before re-testing (387 during 2012). 239 animals have so far been slaughtered either as direct contacts or inconclusive reactors between January and June 2014.
- The number of suspect cases of bTB initially identified during routine post-mortem meat inspection in abattoirs of carcases of cattle from Welsh herds ("slaughterhouse cases") in January-December 2013 was 144 (of which 74 were bacteriologically confirmed as M. bovis infections), compared with 174 (97 confirmed) for the same period in 2012. 79 cases have been identified between January and June with 47 of those confirmed as M. bovis positive between January and June in 2014.
- * Statistics taken from dataset covering the period January 2014-30 June 2014 published by Defra on Wednesday, 10th September 2014.
- Disease statistics for Great Britain are published by Defra and are available at the following link: https://www.gov.uk/government/publications/incidence-of-tuberculosis-tb-in-cattle-in-great-britain

Current epidemiological situation in NI

- 8. NI is epidemiologically distinct from GB and has developed and implemented a separate programme since controls began. Measures of disease in NI are not directly comparable with those in GB.
- 9. The incidence chart (Fig NI1) shows that the live animal surveillance disclosure trend was level for the 4 years prior to August 2011 and then rose consistently for 14 consecutive months peaking in October 2012. Since then it has been fluctuating but has shown an overall downward trend reaching 6.34% at 28 February 2014. The cumulative in year herd incidence to the end of February 2014 is 4.30%. Summary figures are provided below.
- Number of herds with TB found at routine slaughter in the last 12 months (to end October 2013) was 398 and the number in the previous 12-24 months was 383.
- Number of animals tested during 2013 using IFNG was 16,913, with 538 removed solely based on IFNG

results, compared with 16,162 animals tested and 446 removed solely based on IFNG results in 2012.

Number of animals as removed as direct contacts was 565 during 2013 compared with 1,394 during 2012.

The most up to date comprehensive set of disease statistics for NI are available in DARD's published statistics at http://www.dardni.gov.uk/index/dard-statistics/animal-disease-statistics.htm Background on Wildlife

10. The Eurasian badger (Meles meles) is a significant driver for disease spread in areas of England and Wales where the disease is considered to be endemic. It was first identified as a possible wildlife reservoir of infection for cattle in the early 1970s in parts of the South West of England where a high incidence of bTB persisted despite enhanced herd control measures (bTB 'hotspots'). A series of different strategies were developed throughout the 1970s, 80s and 90s to tackle this wildlife source of M. bovis in England and Wales.

11. In NI, DARD recognises that involvement of wildlife, mainly badgers, must be addressed if eradication is to be achieved. Deer are not considered significant in the epidemiology within NI. The role of badgers in the epidemiology has not been quantified but DARD continues to work in partnership with its science provider (AFBI) to identify knowledge gaps and to explore research and development options to complement current work. Both the ongoing "Test and Vaccinate or Remove" (TVR) wildlife intervention research project and Road traffic Accident (RTA) survey will provide epidemiological information to inform our future approach.

Summary of UK

12. In the UK, animal health policy is a devolved matter, so administrations in England, Wales and NI implement policies that reflect their regional circumstances whilst working together to ensure a consistency and similarity of approach where appropriate.

Main Objective for UK

- 13. The objective of the programmes across the UK is the progressive reduction and eradication of TB from the national cattle herd, based on conventional test, slaughter and movement control methodologies. The separate programmes also include measures designed to deal with TB in the wildlife population where it is known to contribute to disease prevalence.
- 14. There is close liaison between the four administrations to ensure that policies are co-ordinated between the different countries and that opportunities to work in collaboration are realised. This includes regular meetings between officials and a monthly meeting of the Chief Veterinary Officers. This ensures that the fundamental cattle measures for controlling TB remain consistent throughout the UK with tailored policies where appropriate to reflect different epidemiological risks.

 Main Measures for UK
- 15. Terminology used to describe the TB status of herds (e.g. Officially Tuberculosis Free (OTF) or status Withdrawn (OTFW) or Suspended (OTFS) is consistent with EU legislation. NI uses OTW and OTS abbreviations.

Summary of controls in the submitted programme

- 16. Latest developments and future plans in each administration are summarised under country headings below and controls are discussed in more detail in Section 4.
- The national surveillance regime complies with Council Directive 64/432/EEC (as amended): o Comparative tuberculin skin testing of cattle herds at regular intervals according to the disease incidence in a defined region (annually in NI, Wales and counties of the West of England, every four years in the low risk counties of the North and East of England, where higher risk herds are placed on annual testing)
- o Immediate movement restrictions (suspension of OTF status) and active management of herds with overdue TB tests (zero tolerance);
- o Complementary slaughterhouse surveillance of all animals slaughtered for food production across the UK;

- o Registration, identification and movement reporting of all cattle.
- o Additionally, as a discretionary domestic policy adopted in annually tested herds in England and Wales, pre-movement testing is mandatory for all cattle over 42 days of age from OTF herds, except those moved primarily directly to slaughter and other limited exceptions.
- Development of TB controls:
- o Use of evidence-based policy making;
- o Publication of bTB statistics, including number of herds registered, TB tests carried out, new herd breakdowns (total and OTFW), reactors and other animals slaughtered, tests overdue and herds under movement restrictions;
- o A wide-ranging bTB research programme;
- o Use of epidemiological and other data to inform and assess effectiveness of policies (annual surveillance report and other ad hoc reports);
- o Development of tailored policies in GB to reflect area disease incidence and risks. As NI is epidemiologically distinct from GB it applies a distinct programme uniformly;
- o Use of advisory technical and stakeholder groups.
- Biosecurity:
- o Animal husbandry best practice guidance;
- o Provision of advice and support for farmers;
- o Projects to raise awareness.
- Control of infection in herds:
- o Isolation, removal and slaughter of test reactors and direct contacts;
- o Post-mortem examination of these animals;
- o Culture of tissue samples;
- o Cattle movement restrictions;
- o Compliance with food hygiene regulations;
- o Appropriate cleansing and disinfection of buildings, transport and equipment;
- o Only one retest is permitted for inconclusive reactors as defined within 64/432/EEC Annex B;
- o Stamping out of severely infected groups or entire herds (partial or total depopulation);
- o Forward and back-tracings from OTFW breakdown herds and check testing of herds that are contiguous to those breakdowns based on a risk assessment;
- o Compensation paid for animals compulsory slaughtered;
- o Epidemiological investigation and risk assessment;
- o Controls on restocking of breakdown herds
- Pre-export testing of all cattle for export from the UK, in accordance with Council Directive 64/432/EEC (as amended).
- TB control measures in wildlife.
- In GB there are measures for dealing with the disease in farmed species other than cattle (e.g. camelids, deer and goats). There is no evidence of any significant impact from these species on the bovine TB control Programme in NI.

Attachments

- 1. Table UK 1 Headline bTB statistics for UK 2008-2013
- 2. Figure GB 1 Number of new TB herd breakdowns disclosed in GB between 1994 and 2013
- 3. Figure GB 2 Annual number and rate of TB test reactors disclosed in GB between 1956 and 2013 and herd incidence rate in GB Jan 2001 Jan 2014
- 4. Figure NI 1 Graph on historical data for NI.
- 5. Map 1 GB Geographical distribution of new bTB incidents with OTFW incidents identified during
- 6. Map 2 NI New breakdowns and chronic breakdowns in 2013
- 7. Map 3 W Wales TB Epi Pilot 6 Main Clusters

- 8. Developments in GB in 2013
- 9. Summary of measures since 2011 and future measure in England
- 10. Footnotes to tables in Sections 6, 7 and 8

3. Description of the submitted programme

Provide a concise description of the programme with its main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence), the main measures (sampling and testing regimes, eradication measures to be applied, qualification of herds and animals, vaccination schemes), the target animal population, the area(s) of implementation and the definition of a positive case.

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England

17. In 2014, Defra published its comprehensive Strategy to achieve OTF status in England. There is an interim objective to achieve OTF status for large parts of the north and east of England by 2025. This will be achieved by three key actions:

- Establishing three TB management regions or zones a High Risk Area, a Low Risk Area and an Edge Area in between now established;
- Applying a range of measures to control the disease within these zones that is practical and proportionate to the disease risk while maintaining an economically sustainable livestock industry. The Low Risk Area strategy has been in place since the start of 2013. The Edge Area strategy was rolled out in late 2013 / early 2014. Measures in the High Risk Area are on-going;
- Ensuring that there is shared governance of the delivery process between beneficiaries including the food and farming industry and the taxpayer.

More details can be found at https://www.gov.uk/government/publications/a-strategy-for-achieving-officially-bovine-tuberculosis-free-status-for-england and a summary of current measures and additional future measures or options can be found at attachment 9. The overarching objectives and targets for the Strategy can be found in section 5.

Defra also announced plans to:

- Continue to strengthen cattle controls to stop the disease from spreading from herd to herd see paragraph 19 for latest developments;
- Improve biosecurity by helping farmers understand the disease risk of cattle they buy. A voluntary risk-based trading scheme was introduced in 2013 and Defra sought views in 2014 as to whether cattle keepers should be legally required to provide the TB history of their herd when selling stock;
- Establish a new grant-funded scheme for badger vaccination projects in the Edge Area details announced in September 2014;
- Continue four-year badger culling projects in Somerset and Gloucestershire. Following recommendations from the Independent Expert Panel that assessed the effectiveness, humaneness and safety of badger culling pilots in 2013, a series of changes have been made to improve delivery of the second year of culling in 2014. These changes will be monitored to assess their impact before further decisions are taken on issuing badger culling licences for new areas in 2015;
- Establish a service in Somerset and Gloucestershire to provide farmers in the cull areas with bespoke advice on how to better protect their farms from disease;
- Continue to invest in new tools such as the development of a new vaccine for cattle and an oral badger vaccine developments on vaccines can be seen at paragraphs 25, 114 and 118-120. Latest Developments
- 18. Attachment 8 outlines the developments in England in 2013.
- 19. In 2014, Defra introduced the following measures:
- Introduced mandatory parallel interferon-gamma assay for OTFW bTB breakdown herds in the Edge

Area; discretionary for OTFS bTB breakdown herds in the Edge Area.

- Introduced radial testing of all herds within 3km of an OTFW bTB breakdown herd in the Cheshire and Derbyshire Edge Area.
- Reduced Common Agricultural Policy Scheme payments for overdue bTB surveillance or 'check' tests.
- Enhanced the approach for dealing with persistent bTB breakdowns.
- Legislation to deliver the removal of the pre-movement testing exemption for movements to and from common land from 30 June 2014;
- Powers to cull wild and untestable cattle;
- Introduced legislation to enable the publication of TB breakdown information;
- New Orders providing statutory compensation to keepers of TB affected camelids removed to slaughter come into effect in England in October 2014 when mandatory TB skin and blood tests are rolled out for TB breakdown herds. These Orders also replace the existing TB deer Orders. A consultation on TB controls for all non-bovine species in England is planned to be launched in October 2014.
- Work is underway to consider a more epidemiological approach to withdrawing OTF status in the event of a TB breakdown.
- Delivered on the commitments made in the Programme in 2014 (see paragraph 32)
 Defra also sought views on
- compulsory post-movement testing of cattle moved from annual testing areas in England and Wales to herds in the Low Risk Area of England as part of the Strategy of achieving OTF status for this area.
- whether cattle keepers should be legally required to provide the TB history of their herd when selling stock

and announced an intention to reduced Common Agricultural Policy Scheme payments for all overdue bTB tests from January 2015.

Wildlife Policy

- 20. Following two public consultations in 2010 and 2011, Defra announced in February 2013 that it would pilot a badger control or culling policy in two areas. The purpose of the 6-week pilots was to confirm our assumptions about how effective (in terms of badger removal) humane and safe it would be to use controlled shooting as a method of removing badgers. Natural England issued licences for Gloucestershire and Somerset in September and October 2012 respectively. The first of the four years of culling ran from August 2013 to November 2013.
- 21. An independent expert panel (IEP) reviewed how humane, effective and safe the controlled shooting technique was in the first 6 weeks. Defra published the IEP's report together with results of AHVLA monitoring.
- 22. Following the IEP's recommendations, a series of changes have been made to improve the effectiveness and humaneness of culling. The second year of culling in Gloucestershire and Somerset will take place in 2014 with the IEP's recommended improvements in place. These changes will be monitored to assess their impact before further decisions are taken on badger cull licences for additional areas in 2015.
- 23. The first injectable badger vaccine, Badger BCG, was licensed in March 2010 and is available for use on prescription. The vaccine has been used in the Government-funded Badger Vaccine Deployment Project in Gloucestershire since summer 2010 and by others such as the National Trust and local Wildlife Trusts. See section 4.4.7.1 for more details.
- 24. In April 2014 Defra announced a proposed scheme for vaccination projects within the edge area in an attempt to create a buffer zone of TB immunity to stop the disease spreading further. Defra announced further details of the scheme in September 2014
- 25. An oral badger vaccine may be a more practical, cheaper option than using the injectable badger vaccine but is still at the research stage. Work underway includes:
- Formulation and bait development;
- Efficacy and safety studies;

- Field deployment studies; preparing and submitting a licensing dossier for assessment by the Veterinary Medicines Directorate.
- 26. We are working to develop practical, sensitive and specific diagnostic tests for badgers as part of the GB research programme administered by Defra on behalf of England and Wales. This would allow us to better understand the scale of badger infection in terms of geographical area. Such tests could mean that future interventions are targeted at individual badgers or setts, rather than the wider population. They could also help us judge how effective vaccination might be in a specific area. The research that Defra is concentrating on:
- Non-invasive tests to identify infected badgers, including the development of blood sampling devices; and
- Tests to identify setts and areas where infected badgers are resident, such as tests to detect bovine TB bacteria in environmental (soil, latrine) samples, including use of polymerase chain reaction (PCR) tests. A list of key enhancements made to the eradication programme since 2011 in England are included in attachment 9.

Wales

- 27. The Welsh Government has had a comprehensive TB Eradication Programme in place since April 2008. The Programme is underpinned by a Strategic Framework for Bovine TB Eradication that was launched in March 2012. The Welsh Strategic Framework includes a range of measures which are being incorporated into policy in a progressive manner and will continue for 2015 and the remainder of this Welsh Government term. The Strategic Framework can be found at the following link: http://wales.gov.uk/topics/environmentcountryside/ahw/disease/bovinetuberculosis/bovinetberadication/tbstrategicframework/?lang=en.
- 28. The Welsh Government is committed to taking a science led approach to TB eradication and our Programme is designed to tackle all sources of infection including cattle, domestic non-bovines and wildlife. The Programme covers all aspects of disease prevention, transmission and breakdown management. The foundations of the Programme continue to be cattle surveillance and controls and addressing the wildlife reservoir of infection and these areas will continue to be the focus in 2015. Wales has had an annual herd testing regime in place since 2010 and this will continue in 2015. There is no area which is subject to less frequent surveillance testing based on epidemiological evidence. Additionally, there is 6 monthly testing of herds in the Intensive Action Area (IAA).

Progress against the strategic framework during 2014 can be found below and measures are described in more detail in Section 4.

Latest developments

Attachment 8 contains the developments in Wales in 2013.

- 29. There are a number of important enhancements to the Welsh Programme taking effect from 30 September 2014. These include:
- In February 2014 and in line with the commitment made in the 2014 UK TB Eradication Programme, the Welsh Government announced that a further review of the remaining Pre-Movement Testing exemptions was completed in December 2013 and that, from 30 September 2014, cattle moving to and from Sole Occupancy Authorities (SOAs) would no longer have an automatic exemption from Pre-Movement Testing for bovine TB. This policy change is on track to be completed and has been communicated to those affected. Further information about this change can be found in section 4.
- The Welsh Government is committed to the complete phasing out the practice of de-restricting certain epidemiologically separate parts of bovine TB affected holdings. This practice is on track to be fully phased out by 30 September 2014, in line with the commitment for 2014.

In addition, an announcement on the TB compensation system in Wales is expected imminently in early autumn 2014. This follows a review of the current TB compensation system in Wales and consultation which set out proposals to introduce a table valuation system in Wales (similar to that operating in England).

30. In 2014, the Welsh Government has made a number of other enhancements to its Programme. New and ongoing initiatives implemented during 2014 and those planned for 2015 include:

- A tightening up of Common Agricultural Policy Scheme penalties for late bovine TB tests from 1 January 2014. The intention is to strengthen this policy from January 2015.
- The piloting of the Cymorth TB initiative in addition to work of the TB Epidemiologist in 6 cluster areas in Wales in 2013/14 and, following review, wider roll out of these initiatives across Wales as appropriate in 2014/15.
- Working with the livestock industry and Regional TB Eradication Delivery Boards, the Welsh Government is developing Risk Based Trading (RBT) proposals. It is also intending on amending legislation that will allow the Welsh Government to make available details concerning the location of TB breakdowns through a web based system.
- Continuation of the five year Intensive Action Area (IAA) badger vaccination project. Year 3 is currently well underway and to date over 1,100 badgers have been vaccination during 2014.
- Wider roll out of badger vaccination in other areas of Wales through the provision of a Badger Vaccination Grant (BVG).
- Continuous monitoring and review of the circumstances in which the gamma interferon test is deployed in parallel with the tuberculin test in Wales.
- Continuation of a Badger Found Dead Survey in the IAA and work to extend the survey across the whole of Wales in 2015.
- Following a successful pilot in 2013, APHA on behalf of the Welsh Government, is targeting persistent herd TB breakdowns through enhanced case management with a view to helping owners regain and then maintain their herd's Officially TB Free status.
- Appropriate enforcement action, alongside Local Authorities, in respect of farmers who fail to test their cattle on time and those suspected of carrying out illegal activity.
- Region specific initiatives led by the three Regional Eradication Delivery Boards. All 3 Boards have held best practice events in addition to evening meetings to enable farmers and veterinary surgeons in their areas to discuss TB issues including policy development with key individuals within Government (WG and APHA)
- Continuation of reactive surveillance for TB in camelids, goats and deer and other non-bovines.
- A watching brief on bovine TB in wild deer populations in Wales (samples taken as part of population management culls).
- Consideration of the application of OTFW status as a default position to all TB breakdown herds. OTFS status would only be granted if there is epidemiological evidence to suggest OTFW status should not be applied.
- Ongoing monitoring of the remaining Pre-Movement Testing exemptions following the review in 2013.
 Work towards removing the Pre-Movement Testing exemption pertaining to movements to and from common land in Wales.
- Consultation on a new TB Order which will consolidate the existing TB Orders and strengthen TB legislation.

England and Wales

- 32. Key enhancements to the programme planned for 2014 in England and Wales:
- Complete the decoupling of Sole Occupancy Authorities (SOAs) from bTB controls by removing the pre-movement testing (PrMT) exemption for movements within SOAs located wholly in annual testing areas of England, and in Wales (Implementation date by September 2014). Completed the announcement has been made in Wales and legislation introduced in England, to take effect from 1st October in both countries.
- Following a review of remaining PrMT exemptions in 2013, further limit exemptions for farm-to-farm movements by removing the exemption for movements to and from common land (Implementation date– by April 2014) Completed in England. The Welsh Government completed a further review of the

remaining PrMT exemptions in December 2013. The Welsh Government continues to review the PrMT testing exemptions and will introduce changes as necessary.

- Improve traceability for the purposes of bTB control by cancelling all Cattle Tracing System (CTS) links between holdings in the Edge Area and holdings in the High Risk Area of England (Implementation date by September 2014). Completed in August 2014.
- Phase out the practice of de-restricting certain epidemiologically separate parts of bTB-affected holdings in England and Wales by the end of 2014 (Implementation date by September 2014). Completed the announcements have been made in both England and Wales to take effect from the end of September 2014.
- 33. In England, Defra Ministers announced on 7 January 2014 that CTS links and SOAs will be abolished in England over a two-year transitional period beginning in 2016. A summary of the current measures and additional future measures or options in England is included in attachment 9.
- 34. In Wales as part of the Welsh Government's 'Working Smarter Programme', ongoing work is being undertaken as part of a wider review of the rules associated with how "holdings" are defined in Wales (currently County, Parish, Holding (CPH)). Preparatory work towards implementing a new CPH business system, which will remove SOAs and CTS links, is planned. Work to enhance existing IT systems is also underway and commencements of the roll out of the revised CPH business system will begin in 2015 and is expected to be completed in 2 years.

Northern Ireland (NI)

- 35. As already indicated NI is epidemiologically distinct from GB and has implemented a separate programme since controls began. NI policy is the progressive reduction towards the eradication of bovine TB, adopting a phased strategic approach to promote effective/efficient ways to reduce disease transmission, namely:
- Control of disease spread between cattle
- Address wildlife role
- Create a strategic delivery partnership with the agricultural industry DARD strategy and aims for TB control in cattle are published in:
- a) DARD Strategic Plan 2012-2020
- To enhance animal, fish and plant health and welfare. This plan lists one of the measures of success as being "a clear direction for the eradication of Tuberculosis" and one of the key actions is to "work with stakeholders to develop a long-term strategy for the eradication of TB in cattle".
- b) In addition, the Agri-Food Strategy Board (established by relevant NI Ministers but chaired and comprised of agri-food industry leaders) endorsed this measure in its recent "Going for Growth" Report that Government and Industry must work together to support a range of animal health and welfare measures including "an agreed strategy to deliver a significant reduction (and ultimate eradication) of Bovine TB".
- c) DARD Business Plan 2013-2014
- Bring forward proposals by 30 September 2013 to strengthen the TB Eradication programme in response to the ARD Committee's Report into Bovine Tuberculosis and progress the programme of TB and wildlife research and studies, including the Test and Vaccinate or Remove (TVR) Wildlife Intervention Research, to inform policy.
- The DARD Minister announced on 17 September 2013 that she planned to establish a Government/ Industry TB Strategic Partnership Group to develop a long-term strategy to eradicate TB from the NI cattle herd with associated implementation action plan, which should outline the cost of implementing the various elements of the strategy; detail how these elements will be funded; and agree who will lead on their implementation. This strategy is to be all embracing and address all the issues such as TB compensation; improving biosecurity; improving communications with farmers and vets; and developing our ability to address the wildlife factor. The Strategy should seek to re-energise relationships with all industry stakeholders; consider as appropriate the enhancement of primary and

secondary legislation; and consider other means to tackle and eradicate this disease.

- Implementation of these aims will continue in 2014/15 and will be contained in Business Plans.
- d) DARD Veterinary Service Business Plan 2014-2015:
- To maintain a robust TB Delivery Programme with a view to long term eradication and publish an Annual TB Report for 2013 by 30 November 2014.

This is DARD Veterinary Service's key objective related to the TB Programme and is supported by various subordinate objectives.

36. On 3rd July 2012 the DARD Minister announced to the NI Assembly Agriculture and Rural Development (ARD) Committee that she had instructed officials to develop Test and Vaccinate or Remove (TVR) Wildlife Intervention Research. TVR is an important and unique scientific study, the aim of which will be to test the effectiveness of this approach on the level of TB in badgers and in cattle in NI. Substantial work has been undertaken to progress the TVR project. It is intended that TVR would provide a unique contribution or insight into TB, and wildlife in NI and is not just a simple replication of research or interventions being undertaken elsewhere.

The TVR design is complex and several key steps had to be carried out to inform the design phase. One such step was badger sett surveying in 2 areas in County Down to establish the location and number of badgers in the areas. This is now completed with land owner participation over 80% in each area. Computer modelling work also had to be undertaken by the National Wildlife Management Centre to help us identify appropriate areas for the badger sett study, the optimum size of area and the frequency and duration of the field activities. The modelling outcomes have assisted DARD epidemiologists design a TVR research mandate.

In May 2014 the TVR Research Project started in a 100km² area in County Down. It is designed to run for 5 years to investigate the effect of the combined use of badger vaccination and the selective removal of TB infected badgers, on badger and cattle TB incidence. Badgers in the TVR area will be captured between May and November annually, sampled and tested for bovine TB, and vaccinated and released if negative. If a badger is positive for bovine TB it will be permanently removed. In year 1 (2014) of the TVR Project, all captured badgers will be vaccinated and released as a mitigation action against the potential increased disease risk that may occur as a result of potential perturbation during subsequent removal of test positive badgers from Year 2 in 2015. Scientific data will also be collected to inform disease transmission, badger ecology and economic analyses as well as quantifying costs and field logistics of implementation. Veterinarians working on TVR are specially trained and licensed under the Animals (Scientific Procedures) Act 1986. The Agri-Food Biosciences Institute will provide analytical and laboratory support. As per Paragraph 11 of the submitted plan, the role of badgers in the epidemiology of TB in NI has not been quantified. Both the ongoing TVR Project and RTA survey will provide epidemiological information for the NI approach going forward.

Further details are provided at http://www.dardni.gov.uk/test-and-vaccinate-or-remove. Latest Developments

Publication of the TB Biosecurity Study: http://www.dardni.gov.uk/tb-biosecurity-study.pdf
Publication of the TB and Slurry Literature Review: http://www.dardni.gov.uk/tb-slurry-lit-review.pdf
Publication of the Badger/Cattle Proximity Study: http://www.dardni.gov.uk/badger-cattle-proximity-report.pdf

Establishment of a field based TB implementation team

Provision of training for all Veterinary field staff involved in delivery of the TB Programme Enhanced arrangements for warranting of new testing officers

Surveillance Procedures

(a) NI has a surveillance, compulsory removal and compensation programme. Surveillance involves both post mortem examination and live animal surveillance.

- (b) NI has had an uninterrupted programme of annual tuberculin skin testing since 1983.
- (c) Slaughter surveillance in NI is highly developed, fully integrated, and is a significant programme surveillance procedure. All animals slaughtered for human consumption undergo post mortem examination, compliant with Regulation (EC) No.854/2004, completed by DARD employed meat inspectors under the immediate supervision of the designated DARD employed Official Veterinarian. The results are immediately available on the computerised APHIS database. Full integration allows prompt actions to be taken by field staff. Further laboratory investigations carried out at our science provider AFBI are also fully integrated with APHIS, ensuring continuity of information and security of actions.
- (d) Live animal surveillance is undertaken using three methods. Results are recorded on APHIS; o Single Intradermal test for MS export certification.
- o Single Intradermal Comparative Cervical Tuberculin Test (SICCT) for population surveillance. In NI, standard methodology of interpretation of the SICCT is applied as per Council Directive 64/432/EEC. In addition to recording the measured skin-fold thickness at each site 72 hours after the time of injection, both the bovine and avian injection sites must be examined for evidence of any gross changes. All changes must be recorded. A clinical inspection of all cattle tested must be carried out at every tuberculin test, and any animal showing signs of emaciation, cough or discharge from the nostrils must be noted. Where any of these signs are seen, the testing officer must carry out a clinical examination of the animal, palpating the superficial lymph node sites and the udder of female cattle. Any animal suspected of TB due to its clinical signs is made a reactor.

o Gamma interferon testing is used as a supplementary diagnostic test in parallel to the SICCT where considered epidemiologically appropriate. It is undertaken within practical limits determined by laboratory facilities and capacity, but is used at a proportionately high level. It is currently targeted at removing additional infected animals from breakdown herds, but its application is under review to optimise its future use.

Severe interpretation of the SICCT results is used to increase sensitivity of testing early in all OTW breakdowns and as considered epidemiologically appropriate elsewhere. Severe interpretation is routinely interpreted as described in the methodology for Wales (Paragraph 96). In addition, Veterinary Officers (VOs) may remove severe Inconclusives or other animals with a bovine reaction where they consider it to be beneficial for disease control. Based on the recorded skin measurements, the computerised database APHIS displays the putative result under both standard and severe levels of interpretation for all animals presented for manual interpretation, and the VO decides on the appropriate final result. Veterinary Service staff instructions define both the mandatory use of severe interpretation within OTW breakdowns and permit the discretion to apply more severe interpretations of the SICCT in other situations. Severe interpretation must be fully applied to one of the first 2 herd tests in an OTW breakdown. Severe or even more sensitive interpretation can also be applied to any other test during the breakdown, and may be applied fully or partially. This approach allows the Patch VO to remove severe inconclusive cattle or other animals with a bovine reaction. Decisions will depend on the individual herd breakdown. Any animal made positive or inconclusive in this way will have the same effect on the breakdown herd as a standard positive or inconclusive e.g. if there is an animal taken as a positive on super-severe, in an OTW herd, that herd will require two more clear herd tests. (e) All NI herds are constantly allocated an OT status, reason for status, type and due date of next test. OT

- statuses are as defined in Council Directive 64/432/EEC (as amended). In addition, if an NI herd discloses more than five skin reactors without regard to disease confirmation, or if otherwise epidemiologically appropriate following veterinary risk assessment, OTW is applied. The status reason specifically defines why the status applies. The next test type highlights the future testing requirement.
- (f) Movement of cattle from OTW and OTS herds is immediately restricted via APHIS.
- (g) Annual herd testing in NI is routine. Animal eligibility complies with Council Directive 64/432/EEC (as

amended). Also, any herd overdue for testing loses OTF status immediately, with further delay resulting in increased movement sanctions and progressing to OTW.

- (h) Herds test more frequently if disease is suspected or confirmed, or if deemed at increased disease risk.
- (i) Animals may not leave a herd during a test except directly to slaughter in NI and with DARD permission.
- (j) No exemptions from the Programme.

Wildlife Policy

- The badger road traffic accident survey is ongoing. The RTA interim report can be found at http://www.dardni.gov.uk/m-bovis-surveillance-european-badgers-rta-epi-eval.pdf
- An international vaccination experts' symposium took place in May 2012
- The badger cattle proximity study concluded March 2014.
- TVR Project see paragraph 36.
- Badger sett surveying has been completed in two designated areas of Co Down. The information gained through the sett survey work has also helped formulate the design of the TVR project.
- There are comprehensive and developing measures within the DARD programme to reflect the evidence from studies to date. Veterinary Service staff instructions cover badger ecology, recognition of badger setts and of signs of badger activity, badger related biosecurity measures, and the legally protected status of badgers. Training has been delivered to all Field VOs and practical demonstrations of badger related biosecurity measures have been provided to Veterinary Service staff and to herd keepers. The likelihood of wildlife involvement in each individual breakdown is assessed by a VO who then provides bespoke wildlife biosecurity information relevant to that individual farm. Herd keepers also receive advice on non lethal measures to reduce potential contact between wildlife and cattle.
- DARD has produced wildlife biosecurity advice leaflets for farmers and vets and has a plan in operation for their distribution to farmers and PVPs. The current wildlife biosecurity advice leaflet is at http://www.dardni.gov.uk/tb-wildlife-biosecurity-leaflet.pdf VOs and inspectors also provide specific advice during farm visits.

DARD is seeking to develop and improve effective communications about on-farm TB biosecurity and wildlife disease protection methods to farmers etc. It is considering how the new Rural Development Programme could assist in delivering bespoke biosecurity training to farmers and to fund badger-cattle separation measures to address issues identified in the TB Biosecurity Study and the Badger-Cattle Proximity Study. It also is actively seeking ways to fund on-farm TB biosecurity improvement measures via rural development funding. A stakeholder workshop has been held to discuss the conclusions of studies and reviews conducted in NI to enhance understanding of important elements of TB epidemiology, including the role of the badger. One aim was to enhance the advice given to farmers and yets

http://www.dardni.gov.uk/index/animal-health-and-welfare/animal-diseases/bovine-tuberculosis/tb-research-and-development.htm

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Duration	of the programme:	2015 - 2020
Duiduoli	OF THE DECUMENT OF A	ZU I J - ZUZU

First year:

X Control

resting
⊠ Slaughter and animals tested positive
⊠ Killing of animals tested positive
Vaccination
□ Disposal of products
⊠ Eradication, control or monitoring

Last year:

⊠ Killing of animals tested positive
☑ Disposal of products
Other, please specify

4.2 Organisation, supervision and role of all stakeholders involved in the programme

Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Descrive the responsabilities of all involved.

(max. 32000 chars):

4.2.1. Programme and Policy

37. The UK country profile compiled by the Food and Veterinary Office provides an overview of how control systems for food and feed safety, animal health, animal welfare and plant health are organised in the UK. The National Control Plan for the UK details the roles and responsibilities of the different authorities and organisations involved in the monitoring compliance with, and enforcement of, feed and food law, animal health and welfare rules and plant health requirements. The control, monitoring and eradication of bovine TB, as with all animal health matters, are the responsibility of the devolved administrations of the UK. Defra is the central competent authority in the UK. The Chief Veterinary

Officer is responsible in Wales and the Veterinary Service (VS) of the Department of Agriculture and Rural Development (DARD) is the designated Competent Authority for the control of bTB in NI.

38. The TB Programme in Defra, the Office of the Chief Veterinary Officer of the Welsh Government and DARD are responsible for:

- policy
- monitoring of the programmes
- project management
- change management
- provision of veterinary advice by embedded vets
- research

4.2.2. Delivery

39. The competent authorities for field delivery of bTB control policy in the UK on behalf of the Government are set out below. The UK is compliant with Regulation (EC) No.882/2004 Article 4(5), when, within a competent authority, more than one unit is competent to carry out official controls, efficient and effective coordination and cooperation shall be ensured between the different units. Animal and Plant Health Agency (APHA) – England and Wales [from 1st October 2014] Executive Agency of Defra primarily responsible for ensuring that farmed animals in England and Wales are healthy, disease free and well looked after. The lead delivery body on TB issues, carrying out or managing:

- Routine on-farm surveillance (skin testing) including testing delegated to official veterinarians employed by veterinary businesses
- Enhanced surveillance
- Annual testing interval review
- Skin test training and audit
- Control measures
- o Service of movement restrictions and movement licences
- o Testing regime including gIFN
- o Isolation of reactors and public health controls
- o Reactor removal and compensation
- o Post-mortem examination and sampling
- o Case management and Veterinary Risk Assessment
- Approval of special types of production units
- Monitoring compliance (e.g. with pre-movement testing)
- Enforcement in conjunction with Local Authorities
- Field epidemiology including use of Disease Report form to inform management and control decisions
- Laboratory support including diagnostic services
- Provides epidemiological and data analysis
- Wide-ranging involvement in TB research and development
- Regional network of veterinary laboratories
- Centralised tracings centre
- Management of contracts with private sector partners
- Facilitating the roll out of Cymorth TB in Wales.

The National Wildlife Management Centre (formerly Fera Wildlife Programme) has been part of APHA since 2013. This move brings better alignment of the services provided to Government and commercial customers. Staff involved in the Badger Vaccine Deployment Project in England are part of APHA. DARD also avails of the National Wildlife Management Centre's expertise, most recently in the modelling associated with the early development of the TVR wildlife intervention research.

Veterinary Service, DARD – NI

Veterinary Service is responsible for integrated delivery of the TB programme in NI including:

- Responsibility for the real time APHIS database through which animal identity, testing and movement are controlled and recorded. This includes post mortem and laboratory test results from AFBI. Controlled access is provided to various users including farmers, markets, food business operators and PVPs.
- Animal registration and movement control
- Post mortem surveillance at all abattoirs
- Epidemiology
- Monitoring of programme delivery
- Export and import tracing and notifications
- Valuation and removal of reactors to slaughter
- Compensation payments
- Quality assurance
- Management of contracts with private sector partners
- Training of staff and delivery partners
- Liaison with external public health agencies, including the Health Service's Consultants in Communicable Diseases, Health and Safety Executive and Public Health Authorities
- Counter fraud measures

Agri-Food and Biosciences Institute (AFBI) – NI

Laboratory testing for tuberculosis control is currently carried out at Veterinary Sciences Division, of AFBI. AFBI is also the primary TB research provider for DARD.

Rural Payments Agency (RPA)

The RPA is an Executive Agency of Defra and incorporates the British Cattle Movement Service (BCMS). The competent authority for livestock movements, identification, imports, deaths and tracing for all cattle to be used for animal health (surveillance, planning and control) and subsidy control purposes (England). In Wales, whilst BCMS is also operational for the functions outlined above, Rural Payments Wales (RPW) controls subsidy payments. The RPA has no role in TB Programme delivery in NI. Food Standards Agency (FSA)

The FSA is a Non-Ministerial Government Department set up to protect public health and customer interests in relation to food in the UK. It is directly accountable to the UK Parliament via Health Ministers and publishes the advice it issues. It is led by a Board appointed to act in the public interest (not representing industry sectors). It has policy responsibility in the UK for the implementation of the EU Food Hygiene Regulations, which are enforced by the Local (food) Authorities. In England and Wales the FSA Operations Group covers post mortem examination of carcases of cattle slaughtered for food consumption including reactors or dangerous contacts identified by APHA, slaughtered in licensed red meat abattoirs. In NI, DARD Veterinary Service's Veterinary Public Health Programme (VPHP) and DARD's Agri-food Inspection Branch conduct meat and dairy inspections respectively on behalf of the FSA NI. Natural England

Natural England is an Executive Non-departmental Public Body responsible to Defra. Natural England administers licensing applications for badger culling in England, see www.naturalengland.org.uk/ourwork/regulation/wildlife/species/badgertb.aspx

Public Health England

Public Health England (PHE) was established on 1 April 2013 as an executive agency of the Department of Health. (The former Health Protection Agency is now part of PHE). PHE incorporates local Health Protection Units, each of which has teams of health professionals including a Consultant in Communicable Diseases (CCDC). CCDCs are specialist doctors who risk-assess and, where necessary, instigate TB screening of human in-contacts upon receipt of a notification from APHA of M. bovis infection in a cattle herd. www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Tuberculosis/

TBUKSurveillanceData/EnhancedMycobacteriumBovisSurveillance/

Public Health Wales and Public Health Northern Ireland

Carry out the same functions as PHE in Wales and Northern Ireland.

Local Authorities

In England and Wales, monitoring and enforcement of animal health aspects of TB legislation will be borne by the Trading Standards Departments of Local Authorities throughout GB. Environmental Health departments of Local Authorities enforce EU feed and food (e.g. dairy) legislation. Local Authorities liaise at a local level with APHA in relation to enforcement of bTB legislation and with BCMS on cattle identification issues.

In NI local authorities have no role in TB programme delivery. Investigation and enforcement responsibilities lie directly with DARD in the first instance. The programme has a TB specific counterfraud structure in place. DARD liaises with the Police Service of NI (PSNI) and other enforcement bodies as appropriate.

Natural Resources Wales

In April 2013 a new single body, Natural Resources Wales, was established and which brought together the functions of the Countryside Council for Wales, the Environment Agency Wales, and the Forestry Commission Wales.

Herdkeepers

Bovine TB is a notifiable disease therefore herdkeepers are legally obliged to notify suspicion of the disease. Herdkeepers also have a responsibility to present all animals for testing as required. Interference with testing or control measures is an offence.

Veterinary Practitioners

Surveillance skin tests are carried out by Official Veterinarians (OV) (in England and Wales) or APHA veterinarians and APHA veterinary paraprofessionals (fully trained lay testers working under the direction of APHA veterinary officers). In NI this testing is carried out by Private Veterinary Practitioners (PVPs) and DARD Veterinarians.

Approval of testing veterinarians requires the completion of field training, field practical examination and attendance at a training seminar. Veterinarians and directly employed TB testers are subject to routine audit of performance. This includes audit of technical application of the test under field conditions.

Notes: (i) Pre-export tests have to be carried out by a veterinary surgeon.

(ii) England and Wales have a comprehensive, tried-and-tested programme for training and assessment of paraprofessional TB testers. They are required to undergo a rigorous training programme under the direct supervision of an approved veterinarian. To complete this they are required to have undertaken a number of TB tests, and seen and identified a number of reaction types and demonstrated a minimum level of competence before appointment. They are thereafter audited, on an 'unannounced' basis, within three to six months of initial appointment followed by regular field audits by full-time Defra veterinary staff at the same interval and to the same clearly-defined standards as veterinary TB testers. There are currently no paraprofessionals involved in TB testing in NI.

In Wales OVs, following a successful pilot, are also taking part in Cymorth TB which aims to provide farmers whose herds are under TB restriction with additional, bespoke support and advice concerning their breakdown with the aim of restoring Officially TB Free Status at the earliest opportunity. Following a report by Cardiff University Social Scientists, which considered various aspects of Cymorth TB, appropriate actions arising from the pilot will be rolled out across Wales during 2014-15.

Valuation

England

Farmers are compensated by the UK Government for TB affected cattle slaughtered for disease control purposes. The vast majority of compensation is determined using monthly table values, which reflect the average sale prices of bovine animals in 51 different categories. The categories are based on the

animal's age, gender, type (dairy or beef) and status (pedigree or non-pedigree). The compensation default position is to use a table valuation. Where insufficient sales data has been collected for a particular category Defra will use the most recently determined table value for that category. If that is not possible, compensation is determined through individual valuation by a professional valuer. Individual valuations are used in less than 1% of cases.

The Welsh Government is responsible for the payment of TB compensation in Wales, which is paid on the basis of market value following an individual valuation by professional "warranted" valuers. In October 2007, the Welsh Government appointed three Monitor Valuers to address concerns that farmers were being overcompensated for TB reactor cattle. This supplemented other measures which include a revised list of "warranted" valuers and the automatic justification of valuations that exceed a set threshold, currently of pedigree animals valued at £4,000 or over and commercial animals valued at £1,800 or over.

TB valuations are closely monitored by the Welsh Government and detailed reports on key trends are produced on a regular basis by its TB Statistics Project Manager. The Monitor Valuers meet with the Welsh Government on a monthly basis to scrutinise all valuations, seeking justification and requesting comparable market data in all relevant cases. Valuers that fail to provide appropriate justification are removed from the list of "warranted valuers". The 'justification' process is continually reviewed with changes introduced where appropriate.

On 28 January 2014 the Welsh Government published a consultation on the introduction of a table valuation system for TB compensation. The proposals would mean that TB compensation would be based on average market prices for pre-determined cattle categories. A statement concerning TB compensation arrangements in Wales is expected in autumn 2014.

Northern Ireland (NI)

In NI valuations are conducted by specialist DARD valuation officers. Animals are valued at full market value. In the event of a dispute there is an appeal system involving independent valuation and/or a valuation appeals process. The work of the DARD valuation officers is subject to close monitoring and justification is required for higher valued animals. DNA tags are applied to reactor animals at TB test read off or at valuation.

4.2.3. Liaison with Stakeholders

Wales

- 40. There is close liaison between the devolved administrations, including through the UK TB Liaison Group so that an appropriate consistency of approach is maintained across GB and NI. England
- 41. The Animal Health and Welfare Board for England (AHWBE) was established in 2011. It brings together independent people with the relevant knowledge and skills, and senior government officials. The AHWBE makes direct recommendations to Ministers on strategic policy affecting the health and welfare of kept animals in England including farm animals, horses and pets (excluding the welfare of zoo and circus animals). The AHWBE convened an expert group in 2012, the Bovine TB Eradication Advisory Group for England (TBEAG) to provide advice on the development of TB strategy and its implementation. For further information see https://www.gov.uk/government/groups/bovine-tb-eradication-advisory-group-for-england
- 42. There are also a number of stakeholder groups looking at specific issues (e.g. cattle movements and biosecurity) which bring together different agencies and industry. In addition, the engagement of local stakeholders and their willingness to work together is essential and the draft Strategy proposes the establishment of voluntary industry-led local eradication boards particularly in the LRA. A local eradication board has been set up in Cheshire in the Edge Area and it provides a model for local organisations taking charge of their local disease situation and working together to integrate services and respond effectively to the disease situation in the county. The board comprises a wide range of representatives from farming sectors, veterinarians, auctioneers, wildlife groups, local authorities and

APHA. Similar eradication boards have also been set up in Derbyshire, Cumbria / Lancashire and Gloucestershire.

Wales

43. The TB Eradication Programme for Wales is overseen by a Programme Board with membership including the farming industry, veterinary profession, APHA and the Welsh Government. In addition, three TB Regional Eradication Delivery Boards ensure that delivery of policy is specific to regional and local conditions and that it is implemented effectively. These regional boards integrate existing responsibilities and include representatives from APHA, the farming industry, veterinary profession, auctioneers, Local Authority Trading Standards and the Welsh Government.

Wales Animal Health & Welfare Framework

- 44. The Wales Animal Health & Welfare Framework is a Programme for Government Commitment which was launched at the Royal Welsh Show in July 2014 by the Deputy Minister for Agriculture and Fisheries. The Framework succeeds the previous current Great Britain Animal Health & Welfare Strategy which ended in 2014.
- 45. The broad vision for the new framework is to continue improving standards of animal health and welfare in Wales, building on the achievements of the Great Britain Animal Health and Welfare Strategy. There will be increased collaboration with industry partners to develop an outcomes based approach underpinned by a robust monitoring and evaluation framework.
- 46. To support implementation of the Framework, a publically appointed Group of six experts was established in June. The Group held their first meeting on 11th June. Their second meeting is on 17th September. Work is also on-going to establish topic focussed partnership networks.

 Northern Ireland (NI)
- 47. The TB eradication programme in NI is supervised by a TB Steering Group, with TB Policy Development and TB Implementation Groups. Stakeholder engagement is conducted via the Animal Health and Welfare Stakeholder Forum and the TB Stakeholder Working Group with membership from industry, veterinary and environmental representative organisations. In addition the Veterinary Service and PVPs engage through a TB Testing Partnership Group and CVO meetings. It is intended to establish a Government/Industry Strategic Partnership Group during 2014 (see para 35).

4.3 Description and demarcation of the geographical and administrative areas in which the programme is to be implemented

Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

(max. 32000 chars):

48. Scotland has achieved OTF status and is not included in this Programme. NI is considered epidemiologically distinct from England and Wales.

England

49. From January 2013, the counties in England were divided into two testing frequency areas: an annual testing area in the south-west and west of the country, where the disease is endemic or considered to be at threat from disease spread, and a four-yearly testing area in the south-east, east and north of the country, where the disease is sporadic and primarily non-indigenous. We are also viewing the edge of the high risk area as a distinct area and have introduced a tailored strategy to tackle the geographical spread of disease. Whilst the testing frequencies, by and large, reflect the disease situation in each area, the annual testing area has been extended well beyond the endemic areas, with some counties allocated

a higher testing frequency than required by Council Directive 64/432/EEC (as amended). In England, APHA consists of four regions, each led by a Regional Operations Director supported by a Regional Veterinary Lead (RVL) and a Regional Management Team. In terms of the holdings on the England-Wales border, the cattle measures only differ slightly and annual testing and pre-movement testing apply equally in counties on both sides of the border. Where there are differences, the 'county' indicator in the 'county-parish-holding' number is used to determine the specific measures that apply (e.g. reactor compensation policy) to border holdings.

Wales

50. The Welsh Government has, since the introduction of the TB Health Check Wales in September 2008, annually undertaken whole herd TB testing of all herds. This approach, which is applied consistently across the 22 counties (Local Authorities) in Wales, is expected to remain as the foundation of the Welsh TB Eradication Programme for the foreseeable future. There is a commitment, that if and when an annual testing regime ceases, there will be no return to a parish based methodology for setting TB testing intervals. The TB Eradication Programme is primarily delivered by APHA who operate nationally through a Country Director, Operations Director and Veterinary Leads, supported by a National Management Team. This service is delivered from a number of offices across Wales but primarily Caernarfon (North Wales) and Carmarthen (South Wales).

51. In 2010 an Intensive Action Area (IAA) was established in west Wales where the risks associated with the principal wildlife reservoir of TB infection (badgers) would be tackled alongside additional cattle disease control measures. The IAA is approximately 288km2 and is primarily located in north Pembrokeshire, but includes small parts of Ceredigion and Carmarthenshire. This is one of the areas with the highest incidence of bovine TB in Europe. See section 4.4.7.1 for further information on the IAA. 52. Since April 2013 and the appointment of a TB Epidemiologist, 6 disease cluster areas have been identified in Wales. The clusters are located in the following regions: Anglesey, East Carmarthenshire, East Monmouthshire, Gower, Intensive Action Area and Wrexham (Map 3). This work was taken forward as a pilot scheme during 2013/14 with the intention to learn lessons and to ensure that specific epidemiological conditions are taken account of during the development of local approaches. The pilot has now come to an end and the Welsh Government is reviewing the actions arising from the pilot with a review to rolling them out across Wales in order to enable a more strategic approach to disease eradication which will inform best use of resources both locally and nationally. The Cymorth TB pilot in 2013/14 also took place within the 6 cluster areas identified above.

Northern Ireland (NI)

53. NI is divided into 10 administrative regions, each with a Divisional Veterinary Office. The Divisional Veterinary Office areas are sub-divided into "patches", each managed by a veterinary officer (VO) supported by a team of technical officers. All are subject to common direction from DARD Headquarters through staff instructions and IT development.

4.4 Description of the measures of the programme

A comprehensive description needs to be provided of all measures unless reference can be made to Union legislation. The national legislation in which the measures are laid down is mentioned.

4.4.1 Notification of the disease

(max. 32000 chars):

54. In full compliance with Council Directive 64/432/EEC (as amended), Bovine Tuberculosis is a notifiable disease; under domestic legislation, any person who suspects the presence of TB in an animal

within their charge is legally required to notify immediately their local APHA office (in England and Wales) or DARD in NI (whether it is clinical signs in the live animal or tuberculous lesions in a carcase).

4.4.2 Target animals and animal population

(max. 32000 chars):

55. The programme will target all bovine herds and animals (including Asiatic water buffalo and bison) kept on agricultural premises in the UK over 42 days old for surveillance purposes and breakdown control purposes. Although in some circumstances APHA may require testing of all bovines in the herd, including calves under 42 days of age. In NI all animals except those that are less than 6 weeks old and retained in their natal herd are required to be routinely tested for TB and all animals are required to be tested in restricted herds. In addition in GB the legislation and programme will contain certain measures to address other reservoirs and sources of TB (including some non-bovine species and wildlife).

4.4.3 Identification of animals and registration of holdings

(max. 32000 chars):

- 56. All cattle and holdings are registered in accordance with Council Regulation (EC) No.1760/2000. In England and Wales a livestock holding is identified by a County Parish Holding (CPH) number. This reference number is used on the Cattle Tracing System (CTS) to report and monitor cattle movements. In England, all fields and buildings making up a holding must be within a 10 mile radius of the main site for cattle and pigs and 5 miles for sheep and goats. Land under the same ownership beyond the 10 or 5 mile radius, are allocated a separate CPH number. 57. In Wales, cattle keepers with separate holdings are allocated different CPHs. The 5 mile rule applies for the movement of sheep and goats.
- 57. In England and Wales all cattle holdings and cattle must be registered onto GB's Cattle Tracing System (CTS) operated by the British Cattle Movement Service (BCMS).
- 58. In NI, cattle are registered with the central authority and each has been allocated a unique herd number and individual identity to facilitate tracing of animal movements. All registered premises are recorded on a central computer database, the Animal and Public Health Information System (APHIS). Full details of the testing programme are maintained on the database. England and Wales
- 59. The cattle identification and traceability system ensures the traceability of cattle from birth to death. It underpins all disease control programmes for cattle, including bovine TB and provides general assurance for consumers of the place of origin and traceability of beef and dairy products. Cattle are identified by a unique animal identification number which is provided by the competent authority, the BCMS.
- All cattle born on or after 1 January 1998 must have an approved ear tag in each ear, bearing its unique identification number, which will remain with the animal throughout its life. For cattle born on or after 1 July 2000, the unique identification number must be a UK 12-digit numeric ear tag.
- Animals born or imported into GB, before 1 January 1998 may continue to be identified by a single tag.
- All cattle must be tagged within 20 days of birth, although in the case of dairy animals, at least one of the tags must be fitted within 36 hours of birth.
- All cattle born or imported into GB, on or after 1 July 1996, must have a valid cattle passport. This details the unique eartag number given to the animal, movement history between holdings (farms/markets/slaughterhouses), the breed, sex, dam identification, holding and date of birth of the animal. Passports

must be applied for within 27 days of birth (within 7 days of the 20-day tagging deadline).

- Details of all births, movements between holdings (farms, markets and slaughterhouses) and deaths of individual cattle, must be notified to the BCMS for entry on the central database, the Cattle Tracing System (births within 27 days of the event, movements within 3 days of the event, death within 7 days of the event).
- Unannounced inspections, based on a risk analysis of holdings, will be carried out by payment agency inspectors on 3% of holdings, to check that keepers are complying with all cattle identification and registration requirements, and an annual report on the results will be sent to the Commission as required by Commission Regulation (EC) No. 1034/2010.
- If errors are found cattle movement restrictions may be imposed (such as individual or whole herd movement restrictions).
- Any keeper found to be deliberately breaking the cattle identification rules may be prosecuted. If the courts find that a keeper is guilty of an offence they may impose penalties, including fines of up to $\pm 5,000$ and possible custodial sentences, or $\pm 10,000$ and custodial sentences under fraud legislation. Northern Ireland (NI)
- 60. All cattle herds in NI are registered with the central authority and each has been allocated a unique herd number to facilitate tracing of animal movements.
- All registered premises are recorded on a central computer database (APHIS).
- Under Council Regulation (EC) No. 1760/2000 cattle are identified by means of a unique identification number authorised by DARD.
- All cattle born after 1 January 1998 are identified with an ear tag in each ear bearing the same unique identification number, which will remain with the animal throughout its life.
- All cattle born after 1 January 2000 must be tagged using all numeric tags.
- Each animal's test results and movement details are held and are readily accessed on a computer database (APHIS).
- Epidemiological investigation and full tracing procedures in compliance with Council Regulation (EC) No. 1760/2000 are instigated following the detection of a diseased animal.
- Cattle Identification inspections are carried out as required by Commission Regulation (EC) No 1034/2010. Additional audit is carried out through routine TB testing.

4.4.4 Qualifications of animals and herds

(max. 32000 chars):

- 61. There are no herds of unknown TB status in the UK. Maintenance, suspension, withdrawal and requalification of OTF herd status will be in accordance with Council Directive 64/432/EEC (as amended). Domestic Legislation:
- Tuberculosis (England) Order 2014.
- Tuberculosis (Testing and Powers of Entry) (Wales) Order 2008; Tuberculosis (Wales) Order 2010; Tuberculosis (Wales) Order 2011; and Tuberculosis (Miscellaneous Amendments) (Wales) Order 2014.
- The Tuberculosis (Examination and Testing) Scheme (NI)1999, Tuberculosis Control Order (NI) 1999 (as amended) ,Tuberculosis Control (Amendment) Order (NI) 2004, Tuberculosis Control (Amendment) Order (NI) 2005 and Tuberculosis Control (Amendment) Order (NI) 2012.

4.4.5 Rules of the movement of animals

(max. 32000 chars):

England and Wales

62. In accordance with Council Directive 78/52/EEC (Article 14), whilst an investigation is being carried out, the herd will be placed under official surveillance and movements of cattle into or out of the herd will not be permitted except in limited and prescribed circumstances to a number of destinations under licence and subject to a satisfactory veterinary risk assessment.

63. In England in November 2013, a new risk-based trading initiative was introduced. Farmers are encouraged to find out further details of the TB history of the stock that they are buying. This includes the date of the animal's last pre-movement test; the date of the seller's last routine herd test; and the date the herd achieved OTF status if it has had a TB breakdown. We are working with auction markets to display this information to buyers. Defra has sought views on whether this should be made compulsory, and the possibility of developing a TB risk score for each holding in England. The Welsh Government is developing similar proposals in conjunction with the livestock industry in Wales and Regional TB Eradication Delivery Boards.

Movement of animals FROM a 'restricted' holding

64. In England and Wales, controlled cattle movements off TB restricted premises are permitted in limited and prescribed circumstances for animal welfare or business viability reasons. All movements from a restricted holding must be supported by a written, satisfactory Veterinary Risk Assessment (VRA) – completed by an APHA Veterinary Officer. Field instructions are provided to APHA staff to ensure VRAs are objective, consistent and robust. Most licensed movements are to slaughter either directly or via an Approved Finishing Unit (AFU); a very small proportion are to other TB breakdown herds (T2 to T2). Approved Finishing Units are operational in England and Wales to enable non-OTF herds to maintain a level of trade whilst mitigating risks for disease transmission. We reviewed and enhanced the enforcement of AFU rules in 2013. The Task Force endorsed the use of AFUs both in its report of its visit to the UK and in its updated working document published in 2013. APHA undertakes unannounced compliance inspection of all AFUs, in addition to any application or re-application inspections. England

There are around two hundred AFUs in England providing an outlet for the fattening and/or finishing of cattle from holdings that do not have such facilities. Cattle keepers wishing to set up an AFU must submit an application to APHA - each application is carefully assessed and strict bio-security conditions are imposed. Compliance with operating rules is assured through regular audit checks. There are different types of AFUs allowed, with some differences in operating rules:

- Non-grazing AFUs in the Edge and High Risk Areas these can source stock from non-OTF and OTF herds;
- Grazing AFUs only permitted in the parts of the High Risk Area where there have been OTFW breakdowns and epidemiological investigations indicate infected wildlife is a problem. These AFUs can source stock from non-OTF and OTF herds;
- Non-grazing AFUs in the Low Risk Area these are not permitted to source cattle from non-OTF herds. They can bring in cattle from OTF herds in the High Risk and Edge Areas subject to clear pre-movement tests.

Cattle held in AFUs cannot be moved to live in unrestricted herds: they can only move to another AFU, direct to slaughter (which happens in the significant majority of cases) or to slaughter via an approved gathering. Compliance with this requirement is carefully checked i.e. all movements from AFUs are closely monitored and verified.

Wales

There are nine AFUS in Wales which are required to operate to a strict set of conditions and are regularly audited. These conditions include that the AFUs must be indoors, have no grazing, be wildlife proof and

can only be established in a high TB incidence area. Once an animal is moved to an AFU it can only go to slaughter.

65. On 1 January 2013 (and from 1 April 2013 in Wales) controls in England were tightened further cattle moved (to live) between TB-restricted herds (T2 to T2) must have had a clear TB test within the 30 days preceding the movement, previously cattle could move up to 60 days after a clear test. 66. Previously, in exceptional circumstances, epidemiologically separate groups of cattle not within or contiguous to the same land parcel on which the infected group of cattle are kept, we considered lifting restrictions on different groups of cattle at different times. Defra and Welsh Government have announced that from October 2014, APHA will no longer allow any partial de-restriction of TBbreakdown holdings in England and Wales. From that date movement restrictions will apply to all cattle on the holding (CPH) for the duration of the breakdown i.e. until all the animals have achieved OTF status and the restrictions are lifted on the CPH. Cattle on all land parcels that comprise the entire holding remain ineligible for export from the UK whilst a holding is under restriction. 67. Additionally, we carry out pre-export checks to ensure that eligible cattle for export have not been resident in the previous 180 days on any holding with some form of ongoing TB restriction (i.e. OTFS or OTFW) or with unresolved TB inconclusive reactors. In its updated working document published in 2013, the Task Force has advised that national legislation should empower the veterinary services to make the necessary decisions in order to quarantee that the appropriate epidemiological unit is used as the primary unit of concern for all the measures of the programme.

Movement of animals INTO a 'restricted' holding

68. In England and Wales, licensed cattle movements on to all new breakdown herds (both OTFW and OTFS) will only be considered after the herd's first official post-breakdown test and the removal of all cattle positive to the skin test (i.e. all cattle remaining have not been categorised as a reactor) and will additionally be dependent on a satisfactory veterinary risk assessment. Any inconclusive reactors must be isolated from the remainder of the herd and retested. Restocking licences may be withdrawn as part of the enhanced management of persistent TB breakdowns.

69. In England, the Government plans to review bTB compensation with the objective of encouraging risk-reduction, for example by ensuring that animal keepers observing defined 'best practice' on biosecurity benefit over those who do not. In England and Wales consideration is being given to paying nil compensation in circumstances where an animal is identified as a TB reactor after it is brought, under licence, onto premises subject to movement restrictions and before the herd regains its Officially TB Free status. This would require a change in domestic legislation.

Northern Ireland (NI)

70. Maintenance of herd registers and ear tag specification is compliant with Council Regulation EC 911/2004. Since 1 January 2000, producers notify the Department within 7 days of movement of an animal using self-written movement control documents. Markets must notify movements to DARD by the end of the next working day. In the case of a restricted animal the producer obtains a movement licence from DARD before moving the animal from their herd direct to slaughter. All movements are recorded and traceable on APHIS. All eligible animals on farms are checked against official records at cattle identification inspections and at TB herd tests, as well as checks at markets and slaughterhouses. If any discrepancy from APHIS details remains unresolved a movement restricting animal status is applied. If identification and traceability of an animal cannot be established at point of slaughter, the carcase is removed from the human food chain. If the disease status of an animal on farm cannot be established the animal is isolated and tested.

71. OTS and OTW herds are immediately subject to appropriate movement restrictions through APHIS. In the vast majority of cases, NI only permits movement out of OTS or OTW herds direct to slaughter within NI, except where OTS status is applied due to an unresolved inconclusive animal where there is no

history of the herd having OTW status applied for disease reasons within the previous three years as per derogation under Annex A 3.A(d) to Council Directive 64/432/EEC (as amended). Cattle movements from TB breakdown herds to other herds are not allowed. However, in exceptional circumstances (e.g. for welfare reasons, lack of feed for animals, etc.) and under strictly applied conditions required to mitigate the recognised risk, a specific move may be sanctioned. This is in line with Section 3.7 of the SANCO/10067/2013 "Working Document on Eradication of Bovine Tuberculosis in the EU Accepted by the Bovine tuberculosis subgroup of the Task Force on monitoring animal disease eradication", which states "Movement restrictions may present major practical or animal welfare problems in particular situations. Derogations are not allowed in the current legislation on eradication. However, after a careful assessment of the individual risk, certain movements may be regarded as of low risk and a reasonable balance between sustaining industry and disease eradication may be achievable." In NI, such movements from restricted epidemiological units (except directly to slaughter in NI) are approved only in very exceptional animal welfare circumstances, each case being considered by the local Veterinary management and following disease risk assessment. In such cases the recipient herd becomes part of the breakdown epidemiological unit assuming the OT status of the original breakdown herd, along with the accompanying restrictions and testing regime. A separate time-bound prescriptive protocol exists to facilitate limited movement only to other TB breakdown herds from breakdown herds experiencing exceptional farm management problems in the event of severe weather events, but these have seldom been required. In NI, movement into OTS and OTW breakdowns is prevented where considered epidemiologically prudent by a Veterinary Officer following a risk assessment, and in all cases, where clinical disease is identified, for a 60 day period following any full herd depopulation, and if considered appropriate for disease control, in herds with a delay in testing schedule.

72. Where a routine herd test becomes overdue, increasingly stringent movement controls are applied routinely as below:

- Immediately overdue, no live moves to market, export, or other holdings.
- 1 month overdue, no live moves to market, export, other holdings or slaughter. No moves in are allowed except one breeding bull on exceptional licence.

OTW status movement

- No live animal movements out except directly to slaughter in NI.
- If considered epidemiologically appropriate, movement restrictions may be increased to prevent all movement off farm and movement onto farm.

OTS status movement

- Live movement out only directly to slaughter in NI.
- OTS herds with the status reason "RI (inconclusive) but no TB confirmed within three years" are derogated under Annex A 3.A(d) to Council Directive 64/432/EEC (as amended) to allow local live movement within UK. However, animals from the herd or those that have originated in the herd since the last clear herd test are not allowed to be exported to another MS.
- If considered epidemiologically appropriate, movement restrictions may be increased to prevent all movement off farm and movement onto farm.

Pre-Movement Testing of cattle

73. England and Wales are fully compliant with the current pre-export TB testing requirements under Council Directive 64/432/EEC (as amended) for MS certification. England and Wales can avail of the derogation available in Annex A 1.1(c) to Council Directive 64/432/EEC (as amended) for intra-MS movements where animals from an OTF herd are not required to be pre-movement tested.
74. However, to reduce the risk of TB spread pre-movement TB testing (PrMT) within 60 days is mandatory under English law for cattle aged six weeks and over moved from OTF herds in England subject to annual routine surveillance testing (or those subject to radial testing). As well as preventing additional new breakdowns this policy is a helpful surveillance tool supplementing the routine TB herd testing regime and slaughterhouse surveillance.

75. In England, to reduce further the risk of TB spread, some exemptions to the national PrMT policy were removed or revised in July 2012 and also in April 2014 when legislation was made to remove the exemption for movements to and from common land with effect from the end of June 2014. The removal of a further exemption in respect of SOAs was introduced in October 2014. The only eligible movements (mostly to slaughter either directly or via finishing units) that remain exempt from national PrMT rules will be movements of cattle are:

- Directly to slaughter;
- To slaughter via a market from which all animals go to slaughter;
- To slaughter via Exempt Finishing Units approved to take cattle which have not had a pre-movement test:
- To slaughter or to Approved Finishing Units via Exempt Markets approved to take cattle which have not had a pre-movement test (Cattle from Exempt Markets may return to their origin premises if it is in an annual tested area);
- From restricted herds to slaughter via Approved Collection Centres;
- From restricted herds to slaughter via to Approved Finishing Units;
- From holdings that are subject to routine annual testing solely for public health reasons (farms open to the public and producers-retailers of unpasteurised milk) and would otherwise be on four yearly testing;
- From approved semen collection centres (because of their high health status);
- For veterinary treatment (provided that the animal is returned to the premises or origin or moved directly to slaughter);
- To agricultural shows where cattle are present for less than 24 hours on site and no cattle are housed i. e. in a covered area with sides which includes marquees; and
- Under specific written exemption granted by APHA.
- 76. In Wales all cattle movements, subject to a number of exemptions set out in a Ministerial Direction, require a clear PrMT 60 days prior to any movement being made. These exemptions are subject to continual monitoring and, following a review in 2012/13 and further tightening of permitted movements not requiring a TB test in April 2013, a further review of the remaining exemptions took place in late 2013. The Welsh Government is working towards removing the PrMT exemption relating to movements within SOAs by September 2014. Proposals for implementation of this change are currently being developed.
- 77. Following the removal of the exemption pertaining to movements within SOAs, the remaining exemptions to PrMT in Wales which are currently subject to review will include cattle under six weeks of age and movements of cattle:
- Directly to slaughter or a slaughter market;
- Returning from market to the holding from which they travelled;
- To (Pre-Movement Testing) Exempt Finishing Units or (Pre-Movement Testing) exempt markets;
- Directly to Approved Finishing Units for cattle under movement restrictions for TB;
- From restricted herds to slaughter via Approved TB Collection Centres;
- From holdings that are subject to routine annual testing solely for public health reasons (farms open to the public and producers-retailers of unpasteurised milk) and would otherwise be on four yearly testing;
- From herds subject to four yearly routine TB testing in England and Scotland (there are no 4 year testing areas in Wales at the moment);
- From approved semen collection centres (because of their high health status);
- For veterinary treatment (provided that the animal is returned to the premises or origin or moved directly to slaughter);
- Between their registered holding and commons in relation to which their keeper has rights of grazing (mandatory pre-movement testing is necessary for cattle that are moved from commons to premises other than their main premises). The Welsh Government will be working towards removing this exemption during 2015;

- To un-housed shows of less than 24 hours in duration and returning to the holding from which they travelled; and
- Any movement that is approved by the Welsh Ministers.

78. NI is fully compliant with the current requirements of PrMT under Council Directive 64/432/EEC (as amended) with regard to the use of the Single Intradermal Test for MS certification. NI avails of the derogation available in Annex A 1.1(c) to Council Directive 64/432/EEC (as amended) for intra-MS movements where animals from an OTF herd are not required to be pre-movement tested. In addition to Council Directive 64/432/EEC (as amended) requirements, in NI any animal that has not undergone an animal level test within a period of 15 months must undergo a pre-movement test before live movement except directly to slaughter in NI. There are no clearly geographically defined areas of significantly higher or lower prevalence, only geographical shading of prevalence. There tends to be clustering of disease at a very local area. More herds in these clusters are TB restricted and cannot move cattle except to slaughter, while herds that are deemed to be at risk following veterinary risk assessment are tested every four months. Therefore advantages of pre-movement testing in such areas will be minimal in the context of existing controls. Further pre-movement testing is of most benefit where there are large inter-test intervals. This will be less effective in NI where the maximum herd inter-test interval is 1 year, and the average is 7 months.

79. GB Statistics on PrMT are available at https://www.gov.uk/government/statistical-data-sets/other-tb-statistics.

4.4.6 Tests used and sampling schemes

(max. 32000 chars):

4.4.6.1. Types of tests used

80. As permitted in Council Directive 64/432/EEC (as amended), the Single Intradermal Comparative Cervical Tuberculin (SICCT) test will continue to be the primary screening test for bTB in the UK. There is also veterinary discretion to increase the sensitivity of the test by altering interpretation. For example, severe interpretation is used for short interval tests of OTFS herds in the Edge area in England. For export certification the single intradermal test (SIT) is applied in accordance with Council Directive 64/432/EEC (as amended).

- 81. In line with Council Directive 64/432/EEC (as amended), the interferon-gamma (IFN-gamma or Bovigam ™) test will be used as a parallel test, alongside the tuberculin skin test in specified circumstances. Using both tests in parallel in this way enhances the sensitivity of testing so enabling as many infected cattle in a herd as possible to be identified and removed from the herd at the earliest opportunity.
- 82. In England, the primary focus of the IFN-gamma test will be in OTFW breakdown herds in lower risk (4 yearly testing) areas and at the edge of the high risk area for OTFW herds and on a discretionary basis for OTFS herds; the objective being to reduce the risk of new, intractable TB hotspot areas becoming established in hitherto low prevalence areas and to prevent the expansion of the high risk area. IFN-gamma may also be used in certain chronic OTFW breakdowns in the high risk area.
- 83. In Wales, the IFN-gamma blood test will be used in specific OTFW herds as an ancillary parallel test to enhance sensitivity in areas deemed of lower risk and elsewhere when epidemiological evidence suggests it is warranted.
- 84. Interferon Gamma Testing is extensively used where it is considered epidemiologically appropriate throughout NI. It is undertaken within practical limits determined by laboratory facilities and capacity,

but is used at a proportionately high level. It is currently targeted at removing additional infected animals from breakdown herds, but its application is under review to optimise its future use. 4.4.6.2 Routine tuberculin skin herd testing programme

85. All herds and animals are included in the monitoring programme. The herd owner will be responsible for arranging scheduled tests under the routine surveillance programme, which will be paid for by Government. Herd owners are given advance notice of the 2 or 3 month window (1 month window in NI).

86. In England and Wales, test notification letters will be sent centrally from APHA to ensure consistency of notification across England and Wales. Official Veterinarians (OVs) will also be notified by APHA of the due dates for their clients' herd tests. In NI, completion of a routine herd test automatically generates a letter stating the due date of the next test, to whom the next test is allocated, the OTF status of the herd and the implications of not testing on time. A further letter is generated 2 months in advance of the due date reminding them of the due date, advising them to contact the practice/Testing Officer to whom the test is allocated and reminding them of the implications of not testing on time. All NI TB testing practices have electronic access to tests that are allocated to them.

Overdue Testing

87. To encourage compliance with the tuberculin testing programme, a zero tolerance regime for overdue tests was introduced in February 2005, whereby a herd's OTF status is automatically suspended as soon as a TB test becomes overdue. Movement restrictions are applied immediately and APHA actively manage these cases through a combination of formal warnings and staged sanctions. From January 2014, in England we have enhanced the already existing cross compliance process for overdue TB surveillance tests, potentially leading to a referral of the herd owner to the Competent Authority (in England, the Rural Payments Agency) for a penalty reduction under the CAP scheme subsidy payments, and to the Local Authority for prosecution. Initial indications are that the numbers of overdue TB tests are reducing and we are planning to extend these penalties to all TB test types (except tracing tests) from January 2015. In Wales, since 1 January 2014 we have been tightening up cross compliance penalties for late TB tests. From January 2015 the Welsh Government is looking to further strengthen this policy.

- In England in March 2014, a new power was introduced to enable the slaughter of wild / untestable cattle. In Wales, the reasonable costs incurred in carrying out such action may be recovered from the cattle keeper in these cases.
- 88. A similar procedure of routine suspension of OTF status for overdue testing has been in force in NI since November 2004.
- 89. In England, Defra introduced from 1st July 2012 new compensation rules herd owners who fail to test by prescribed deadlines risk receiving reduced compensation (reduced by up to 95%) if reactors are disclosed when the herd is tested. Once tested, a herd is marked forward in the APHA database for its next TB test according to the normal TB testing frequency for the area and taking also into account the herd's TB history and TB risk factors.

90. A similar process has been underway in Wales since 2010. Under the Tuberculosis (Wales) Order 2010, the Welsh Government is able to calculate compensation at less than market value, for example when a farmer fails to arrange a TB test on time, or due to other breaches of the Order. A further strengthening of this legislation, by means of a new TB Order is intended to further promote best practice and align compensation levels with appropriate behaviours, widen and clarify circumstances in which a Veterinary Improvement Notice might be served and extend the ability to recover costs in cases of non-compliance. 91. An enhanced OV auditing programme has been developed and implemented by APHA to provide more robust quality assurance of veterinary training and skills on TB to supplement existing training of its own TB testers and Official Veterinarians. In NI, in addition to DARD's routine formal audit process in place for quality assurance of private sector suppliers of testing surveillance, the procedures for the approval of new PVPs were amended in May 2013 to include assessment of the candidate's ability to

carry out maintenance tasks on a McClintock syringe.

4.4.6.3 Inconclusive reactors (IRs)

- 92. In compliance with 64/432, cattle are allowed one skin test with an inconclusive result without compulsory removal.
- 93. A non-negative result at a second consecutive test results in mandatory removal as a reactor animal. In England and NI, if an animal in a TB breakdown herd is recorded as inconclusive on either Standard or Severe interpretation and remains inconclusive on either Standard or Severe interpretation on subsequent retesting, then the animal is removed as a reactor. Herd keepers can opt to slaughter IRs voluntarily before the second test. The test interpretation methodology used in England is provided in APHA instruction TB 64 (E/S) & TB 64A (E/S).
- 94. Wales is fully compliant with 64/432 in respect of inconclusive reactors to the comparative test at the test interpretation indicated within Annex B section 2.2.5.3.2. All animals which are twice inconclusive reactors at consecutive tests read at standard test interpretation are deemed to be reactors.
- 95. In Wales the criteria for comparative test interpretation to improve test sensitivity is modified based on epidemiological consideration of the breakdown. This severe interpretation of the comparative test results in some animals which pass the test at standard interpretation, being classified as inconclusive at a severe test interpretation. Any of this cohort of animals which is inconclusive at consecutive tests, solely as a result of one or both of the tests being read at severe interpretation, is gamma interferon blood tested and if gamma interferon test negative is permitted one further skin test which must be passed, otherwise animals are deemed to be reactors and slaughtered.
- 96. The test interpretation methodology used in Wales is provided in APHA instruction TB 64 (W) & TB 64A (W).

Reaction Result at Standard Interpretation

PASS (Retain)

- 1. Animals showing a negative bovine reaction and a positive or negative avian reaction.
- 2. Animals showing a positive bovine reaction equal to or less than a positive avian reaction. INCONCLUSIVE (Retest)
- 1. Animals showing a positive bovine reaction not more than 4mm greater than a positive avian reaction.
- 2. Animals showing a positive bovine reaction and a negative avian reaction where the difference is 4mm or less.

FAIL (Remove)

1. Animals showing a positive bovine reaction more than 4mm greater than a negative or positive avian reaction.

Reaction Result at Severe Interpretation - Wales

PASS (Retain)

- 1. Animals showing a negative bovine reaction.
- 2. Animals showing a positive bovine reaction and positive avian reaction, where the avian reaction is more than 2mm greater than the bovine reaction.

INCONCLUSIVE (Retest)

1. Animals showing a positive bovine reaction and positive avian reaction, where the bovine reaction is either 1 or 2mm less, equal to, or 1 or 2mm more, than the avian reaction.

FAIL (remove)

- 1. Animals showing a positive bovine reaction and negative avian reaction.
- 2. Animals showing a positive bovine reaction more than 2mm greater than a positive avian reaction. 4.4.6.4 Imported cattle
- 97. All cattle imported into the UK must comply with the TB certification conditions set out in Council Directive 64/432/EEC (as amended).
- 98. For imports into GB from NI and the Isle of Man, cattle are subject to PrMT within 30 days of departure using the comparative skin test. Additionally, post import skin testing of cattle from NI, the

Republic of Ireland, Isle of Man, and any non-OTF EU Member States is conducted 60 to 120 days after arrival in GB, unless the animals are destined for direct slaughter. Post-import TB tests are currently performed at Government's expense. Movement restrictions are not applied to either the animal or the herd during this period before the test is conducted (unless the post-import test is overdue). Based on a risk assessment, it may also be necessary to carry out TB checks and testing of certain consignments from third countries. Post-movement testing of cattle is encouraged as best practice. In 2014, Defra sought views on compulsory post-movement testing of cattle moved from annual testing areas in England and Wales to herds in the Low Risk Area of England as part of the Strategy of achieving OTF status for this area.

4.6.6.5 Exports of cattle to other EU Member States

99. Cattle of at least 42 days of age that are intended for intra-EU trade are TB tested in the 30 days prior to the date of export (as per Article 6 of Council Directive 64/432/EEC (as amended)) using the single intradermal comparative cervical test. However, only the bovine reaction will be considered when interpreting the test results in such animals. In line with point 2.2.5.3.4 in Annex B to Council Directive 64/432/EEC (as amended), any animals showing a positive bovine reaction (i.e. an increase in the skin fold thickness greater than 2 mm or the presence of oedema 72 ± 4 hours after tuberculin injection) will not be certified for intra-EU trade.

100. Additionally in England and Wales we carry out pre-export checks to ensure, inter alia, that eligible cattle for export have not been resident in the 180 days on any holding with some form of on-going TB restriction (i.e. OTF suspended or withdrawn) or with unresolved TB inconclusive reactors.

101. If an exporting herd subsequently becomes a breakdown relevant Member State Competent Authorities are notified of details.

4.4.6.6 Slaughterhouse surveillance

102. Slaughterhouse surveillance is a key part of the bTB surveillance system. In GB approximately 2 million cattle are slaughtered each year. All cattle sent to slaughter for human consumption are inspected for signs of bTB and all suspect tuberculous lesions in carcases must be notified to APHA without delay.

103. Slaughter surveillance is, by definition, reactive and driven by multiple factors, including the sensitivity of the tuberculin herd testing programme and the rate of infection in cattle. It is, therefore, difficult to set precise targets for granuloma submissions in an endemic bTB situation, such as in England and Wales. Nevertheless, post-mortem meat inspection of cattle is a key element of the bTB surveillance system and this is set to continue in the next years. In 2013 APHA investigated samples from 1,516 cattle carcases with suspected TB lesions at routine slaughter (1,577 in 2012), of which 1,073 (71%) yielded M. bovis on culture (1,088 (69%) in 2011). Slaughter TB surveillance was responsible for detecting 21.2% of new OTFW breakdowns in British cattle herds during 2012, down from 23.2% in 2011, but increasing from 17% in 2009 and 11% in 2001. The reason for this increase in the contribution of meat inspection to the overall detection of bTB has not been determined and it remains unclear whether there has been a genuine increase in infected animals presented for slaughter or if the increase is due to a heightened awareness by FSA meat hygiene inspectors as a result of enhanced training and awareness. Defra and Welsh Government have commissioned research (mathematical modelling) into this field that should help us establish whether the current detection rates are consistent with the estimated prevalence of infection in cattle and whether submission targets should be set for specific slaughterhouses. 104. In NI 0.4-0.47 million cattle are slaughtered each year. There are 10 licensed cattle slaughter plants and all cattle killed are examined post mortem by DARD employed meat inspectors. The number of culture positive LRS animals and associated data figures are recorded to Divisional level in the monthly official statistics and are monitored by programme management. In NI during years 2009 to 2013, the disclosure rate of suspected TB granulomas at routine slaughter (LRS) of cattle which had not been imported directly to slaughter ranged from 958 – 1192 cases per annum or 0.229% to 0.305% of cattle slaughtered. The TB confirmation rate (histology and / or culture positive) for LRS ranged from 62.08% to

67.91% per annum. It is expected that both disclosure and confirmation rates will remain similar during 2014.

4.6.6.7 Control in non-bovine animals

105. Suspicion of disease in the carcase of non-bovine species is notifiable. Passive surveillance is and will continue to be carried out on domestic livestock other than cattle (farmed deer, sheep, pigs, camelids and goats) mainly by meat inspection in animals going through licensed abattoirs and, in the case of camelids, by scanning surveillance in APHA regional laboratories (post-mortem of suspected clinical cases).

106. New Regulations providing statutory compensation to keepers of TB affected camelids removed to slaughter will come into effect in England in October 2014 when mandatory TB skin and blood tests are rolled out for breakdown herds. These Regulations also replace the existing TB deer regulations. A consultation on TB controls for all non-bovine species in England is planned to be launched in October 2014.

107. In Wales, TB surveillance in non-bovines is reactive. The Tuberculosis (Wales) Order 2011 provides APHA with the powers it needs to deal effectively and quickly with incidents of TB in certain non-bovine animals (camelids, goats and deer) similar to those available in relation to bovines. The Order also introduced statutory compensation for any of these non-bovine animals that are removed and slaughtered as TB reactors. These are set compensation figures (up to £1,500) rather than individual valuations as in the case of TB reactor cattle. A new policy for the TB testing of camelids has been introduced by the Welsh Government with the mandatory use of both the skin test and blood (antibody) tests in skin test negative animals where M. bovis infection has been confirmed in a herd and when animals moved from infected herds are tested. This new policy is being introduced in order to improve the detection of infected animals, clear up infection quicker and reduce the spread of disease from infected herds.

108. In NI, disease confirmation in a non-bovine species is considered in relation to the risk to bovine population, and neither vaccination nor treatment of non-bovine animals is permitted.

109. Vaccination of non-bovine animals is prohibited.

4.4.7 Vaccines used and vaccination schemes

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4.4.7.1 Wildlife Controls including Badger vaccination England

110. Following two public consultations in 2010 and 2011, Defra announced in February 2013 that we would pilot a badger control or culling policy in two areas. The purpose of the pilots was to confirm our assumptions about how effective (in terms of badger removal), humane and safe it would be to use controlled shooting as a method of removing badgers. Natural England (the licensing authority for badger culling) issued the first culling licence, for West Gloucestershire, in September 2012. The second licence, for West Somerset, was issued in October 2012. The first year of four years of culling began in August 2013 and lasted until November 2013.

- 111. An independent expert panel (IEP) reviewed how humane, effective and safe the controlled shooting technique was in the two badger culling. They have published a report of their findings together with results of monitoring of pilots by APHA.
- 112. Following recommendations from the IEP, a series of changes have been made to improve the effectiveness and humaneness of culling. The second year of culling in Gloucestershire and Somerset as part of the four-year culls will start with the IEP's recommended improvements in place. These changes will be monitored to assess their impact before further decisions are taken on more badger cull licences

in 2015.

113. The first injectable badger vaccine, Badger BCG, was licensed in March 2010 and is available for use on prescription. The vaccine has been used in the Government-funded Badger Vaccine Deployment Project (BVDP) in Gloucestershire since summer 2010 and by others such as the National Trust and local Wildlife Trusts. See section 4.4.7.1 for more details.

114. In April 2014, Defra announced a proposed scheme for vaccination projects in the edge area in an attempt to create a buffer zone of TB immunity to stop the disease spreading further. Defra announced further details of the scheme in September 2014

An oral badger vaccine may be a more practical, cheaper option than using the injectable badger vaccine but is still at the research stage. Work underway includes:

- Formulation and bait development;
- Efficacy and safety studies;
- Field deployment studies; preparing and submitting a licensing dossier for assessment by the Veterinary Medicines Directorate.

Wales

115. A Welsh Government project to vaccinate badgers using "BadgerBCG", administered via injection, in the IAA (approximately 288km2) in west Wales began in May 2012. In line with the recommendations of the Wales Vaccination Technical Group, vaccination will continue in the IAA for five consecutive years. The project is being developed to ensure that the potential effect can be monitored with a view to assessing its impact. A total of 1,424 badgers were vaccinated during the first year of the project, and 1,352 were vaccinated in year 2. The third year of the project is well underway and to date over 1,000 badgers have been vaccinated in 2014. Reports on the first and second years of the project are available at http://wales.gov.uk/topics/environmentcountryside/ahw/disease/bovinetuberculosis/intensive-action-area/badger-vaccination-iaa/?lang=en

In order to analyse the impacts of the enhanced measures underway in the IAA, APHA has been commissioned to produce reports that analyse the differences between bovine TB indicators in herds in the IAA and herds in a comparison area. The first 2 of such reports can be found at the following links; the third report is currently being produced: http://wales.gov.uk/topics/environmentcountryside/ahw/disease/bovinetuberculosis/intensive-action-area/8747321/?lang=en

http://wales.gov.uk/topics/environmentcountryside/ahw/disease/bovinetuberculosis/intensive-actionarea/8747312/?lang=en

116. A Badger Vaccination Grant has been established to provide farmers, landowners, and other organisations with the opportunity to apply for financial support towards badger vaccination. Successful applicants will receive up to 50% of the eligible costs of badger vaccination. Up to £250,000 a year will be available for 5 years. The Badger Vaccination Grant opened for applications in October 2013. There are currently seven privately delivered projects in Wales benefiting from funding under the Badger Vaccination Grant. Consideration is being given to a further application window before the end of this year.

Northern Ireland (NI)

117. Vaccination of badgers is taking place as part of the TVR Wildlife Intervention Research, which commenced on 27 May 2014. This research project will run for 5 years (2014 - 2018). The TVR Project will accumulate substantial data on badgers which will need to be analysed and understood at the end of the project. We will seek to extend powers in NI to allow lay vaccination of badgers, under licence, for example on lands owned or managed by environmental organisations.

4.4.7.2 Cattle vaccination developments

118. Research continues to be funded into cattle TB vaccination experiments with BCG and other vaccine

candidates, which include a range of live attenuated and sub-unit vaccines. EU legislation currently prohibits the use of TB vaccines in cattle, and Council Directive 64/432/EEC (as amended) would prevent trade in vaccinated cattle because vaccination with BCG sensitises cattle to the skin test causing them to react as if they were infected. However, vaccination is expected to offer an additional, valuable tool for controlling and eradicating bovine TB, in particular in endemic areas, so research is being carried out in GB to develop and validate tests to 'detect infected among vaccinated' animals (so-called 'DIVA' tests) to address the legal concerns. An application for a UK Marketing Authorisation for BCG in cattle was submitted to the UK Veterinary Medicines Directorate in January 2012. VMD completed its initial assessment of the licensing application in June 2012 and has requested additional information before further consideration can be given to the application. A DIVA test based on the interferon gamma test, has been developed and internally validated in laboratory studies.

119. Commissioner Borg wrote to the Secretary of State in January 2013 to say that fundamental scientific information is not yet available on the reliability and feasibility of cattle vaccination accompanied by use of DIVA test(s) that is fundamental for a possible change in the current EU policy on the control and eradication of bTB. Commissioner Borg proposed a tentative time line for bTB vaccination of cattle in UK, showing the series of steps/milestones that will be needed to identify the evidence and deliver this through UK based field trials over the coming years. EFSA provided an opinion to the European Commission in December 2013 on the conduct of possible vaccine and DIVA field trials and that has been used as part of a Defra funded research product to inform the design of field trials to support an application for an Animal Test Certificate to undertake field trials starting in 2015. 120. Defra officials, working closely with their EU counterparts have agreed a series of measures to ensure the safety and security of cattle and their products from these trials. These include: all cattle taking part in the trials will be marked to prevent their live trade; herds taking part in the trial will be deemed to be OTFW during the trial and will need two negative skin tests to regain their TB Free status. Defra and the Welsh Government will engage with the supply chain to publicise the results of the risk assessment into cattle products from vaccinated animals. Milk from trial animals will be pasteurised before being put on the market; and meat from animals from the trials will have to pass normal meat inspection and be deemed fit for human consumption before being put on the market.

4.4.7.3 Research projects

England and Wales

120. Defra administers a wide-ranging TB research and development programme on behalf of both England and Wales, aimed at improving our understanding of the disease and at developing novel tools and refining existing tools and how we apply them to tackle the disease. It covers many branches of science (including immunology, vaccination, diagnostics, epidemiology, ecology and genetics), as well as social science and economics. Between 1991/92 and 2011/12 Defra funded over 100 individual research projects, and invested approximately £93 million in TB research and development. In recent years, an increasing proportion of this research budget has been directed towards developing vaccines and associated diagnostic tests. The content and direction of the research programme is described in further detail in the 2013/14 – 2017/18 Bovine Tuberculosis Evidence Plan at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181866/pb13909-evidenceplan-bovine-tuberculosis.pdf.pdf . Further details of ongoing research and reports of completed projects can be found at http://randd.defra.gov.uk.

Northern Ireland (NI)

- 121. In NI research needs are established and commissioned through a formal evidence and innovation process to ensure well informed and evidence based policy development. Industry stakeholders are involved to help identify and refine TB evidence needs and priorities. A summary of the bTB research projects currently underway or recently completed is listed below.
- TB Biosecurity Study aimed at determining the differences in the characteristics of herds that recently had a TB breakdown against those that had no recent history of a breakdown in a TB high incidence area.

Completed and published online.

- Gamma Interferon (IFN-g) Project to undertake an evaluation of the IFN-g test as currently implemented to optimise best use to aid control and eradication of bTB in NI. An initial analysis has been completed and is being written up.
- Badger-Cattle Proximity Study to assess the interactions between cattle and badgers in farm buildings and at pasture in a TB high incidence area, better inform our understanding of disease transmission risks and help target biosecurity advice. Completed and published on line.
- Badger Road Traffic Accident Survey to provide ongoing monitoring of the prevalence of M. bovis in badgers; geographic distribution; etc.
- Literature Review on the role of slurry in spreading TB to provide a comprehensive review of the published work or work nearing completion on the role of slurry in spreading TB. Completed and published on line.
- Analysis of Molecular Strain Typing Data to optimise the practical application of molecular strain typing in the control of TB. Initial survey paper completed.
- Risk factors associated with multiple reactor and chronic herds to investigate the risk factors for herds with persistent and/or chronic infection in order to further reduce disease in those herds. Datasets are being analysed.
- Test and Vaccinate or Remove (TVR) Wildlife Intervention Research to design specific wildlife intervention research involving the testing of live badgers; vaccinate and release of the test negative badgers; and remove the test positive badgers. This wildlife intervention research will focus on removing diseased badgers and protecting uninfected ones. The aim of this wildlife intervention research will be to test the effectiveness of this approach on the level of TB in badgers and in cattle in the north of Ireland. Badger sett surveying in 2 areas of County Down was completed in January 2014 as a prerequisite to the commencement of the TVR Research Project. TVR research field activities commenced on 27 May 2014 in a 100km2 area in County Down. The TVR project is designed to run for 5 years. Badger ecology monitoring will take place throughout the 5 year TVR Research period. 122. Other R&D research commissioned in 2013/14, to investigate the role of endemic diseases in relation to susceptibility to TB and to consider the value of serological tests for TB, will be progressed during 2014/15.

4.4.8 Information and assessment on bio-security measures management and infrastructure in place in the holdings involved.

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- 123. The competent authorities in the UK collaborate with industry and the veterinary profession to ensure practical advice, based on the best scientific evidence, is provided to cattle keepers on how they can reduce their TB risks through biosecurity. Advice (DVDs and leaflets) freely available to cattle keepers set out what TB is and what it means to have it on farm, and sets out effective measures to reduce the risk of TB transmission (cattle to cattle and wildlife to cattle).
- From January 2010, APHA delivered enhanced veterinary advice for farmers in England experiencing their first bovine TB breakdown, through extended disease investigation visits.
- In England herds contiguous to breakdowns also receive advice on biosecurity.
- APHA's series of 'TB in your herd' advice and guidance leaflets were updated and republished in summer 2012.
- In Wales from October 2013, as part of the Cymorth TB initiative, OVs have been providing bespoke advice to farmers with new and existing TB breakdowns to assist them in achieving and maintaining OTF status. This advice covers aspects such as biosecurity and best practice.

- Work is also underway in Wales to strengthen TB legislation and this will include further ways in which biosecurity practices and other behaviours can be linked in with TB compensation. Areas likely to be strengthened and implemented during 2015 as part of this process include:
- o To further promote best practice and align compensation levels with appropriate behaviours; o Widen and clarify circumstances in which a Veterinary Improvement Notice might be served; o Extend the ability to recover costs in cases of non-compliance.
- In Wales, there are a number of ongoing regional initiatives to encourage good on farm biosecurity practice. For example cattle keepers in the IAA have access to biosecurity assessments on request and the Wales TB Regional Eradication Delivery Boards have initiated biosecurity Intensive Treatment Areas on the Gower Peninsula and in the Wrexham area. The three Boards have also arranged a series of best practice events.
- DARD issued all herd keepers in NI with the local publication "Biosecurity Code for NI farmers and guidance for official visitors to farm properties and recreational users of farmland." This book describes the reasons for having a code, legal requirements, notifiable disease and reducing risks of allowing disease on to premises.
- DARD Veterinary Service officials visit and advise individual NI herdkeepers on movements and segregation of cattle in all breakdown premises, particularly in relation to preventing spread of disease to contiguous herds. Specific written biosecurity advice is provided at the start of the breakdown. Further, a "TB in your herd" booklet is given to all NI breakdown herds and is also freely available on the internet. Both the booklet and the DARD internet site were updated during 2013. Movements of personnel and equipment that have the potential to carry disease are investigated and appropriate biosecurity advice given. Herds contiguous to breakdowns are notified of risk and also receive biosecurity advice.
- New biosecurity leaflets have been produced by DARD during 2013 with input from NI industry representatives and are available on the DARD web site. DARD Veterinary Officers deliver these to keepers of all breakdown herds at breakdown visits. They are also circulated to the keepers of all herds identified for risk testing, and are also hand delivered to all farms by DARD staff conducting Brucellosis herd tests.
- Defra is changing legislation in England in October 2014 to enable the publication of TB breakdowns so that other farmers can take appropriate measures to mitigate risks of disease transmission. Work is also underway to change legislation to this affect in Wales.
- Defra is reviewing the application of biosecurity measures, both on- and off-farm and will consider measures which encourage improved uptake of biosecurity. The Welsh Government is also involved in this project.
- 124. As part of the Edge Area strategy, Defra held a series of workshops with farmers and vets in autumn 2013. A key component of the workshops was to underline the need for good on-farm biosecurity in terms of minimising contact between cattle and badgers; between cattle and neighbouring herds; as well as taking more informed decisions on where cattle are sourced and reducing the numbers of cattle movements. There will also be greater co-operation between farmers and vets in managing TB breakdowns and regular updates about the disease situation in local areas.
- 125. The Welsh Government is continuing to work with the veterinary profession to deliver focused veterinary advice (through private vets) to owners of TB breakdown herds as part of the Cymorth TB project. Work is also underway to resolve long-term breakdowns in England and Wales.

4.4.9 Measures in case of a positive result

A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around infected holding)

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4.4.9.1 General Measures

126. Conditions where Officially Tuberculosis Free status is Suspended

In line with Annex A to Council Directive 64/432/EEC (as amended) OTF status will be suspended:

- Where an animal discloses with a positive result to the tuberculin skin test (a reactor);
- Where a test reveals IRs only, in a herd that had OTF status withdrawn within the previous three years. In NI, OTF Status is suspended regardless of the herd history, but the derogation is applied at status reason level.
- Following the discovery of a lesion suggestive of bovine TB in a carcase at a slaughterhouse;
- Where a tuberculin test becomes overdue;
- In suspected clinical cases (although this is very rare and the first action would be to carry out a tuberculin skin test); and
- Where there are no overriding epidemiological reasons to apply OTFW status.
- 127. Conditions where Officially Tuberculosis Free status is Withdrawn
- Disease is confirmed by PME and/or laboratory procedures.
- In Wales and NI, OTFW may be applied on epidemiological grounds where disease has not been confirmed. In Wales such criteria include, if a breakdown herd is contiguous to an ongoing OTFW breakdown, has had its OTF status withdrawn in the preceding three years, or a Veterinary Officer identifies another valid reason. Associated tracings and contiguous testing is also performed, like in any other OTFW breakdown. In NI, it is clear in the DARD Veterinary Service staff instructions that OTW breakdown status can be applied to any herd if the VO decides that the level of disease risk requires it. OTW status can be applied in NI solely where a Veterinary Officer (VO) has considered it to be epidemiologically prudent, for example recent movement out of a herd of an animal that is disclosed as a reactor in another herd. This decision is at the discretion of the patch VO and will be based on their knowledge of the breakdown, the area, and any other relevant epidemiological evidence available to them.
- Furthermore in NI it is an obligation to apply OTW status, without the need for any laboratory/PME confirmatory indication where more than 5 reactors are identified either at a single test or cumulatively during the course of a breakdown. This is based on purely epidemiological risk assessment. OTW status is also applied where the inter herd test interval reaches a maximum of 15 months in NI.
- The Welsh Government is considering the application of OTFW status to all TB breakdowns in Wales as a default position with OTFS status applied only following Veterinary Risk Assessment based on epidemiological evidence to suggest it is warranted. In England, work is underway to develop a more epidemiological approach to withdrawing OTF status.
- 128. Additional actions taken following the identification of reactors:
- Reactor cattle are immediately detained and isolated as far as practicable from other bovine animals and expediently removed for slaughter, in England and Wales the APHA target is within 10 working days and DARD's target is 15 working days.
- No movements will take place unless a licence is issued. In NI no licence is required for moves direct to slaughter as APHIS is a real time database controlling access to the abattoir.
- TB testing will be carried out again at a minimum of 60 day intervals (up to a maximum of 90 days). For all non-OTF herds, in England and Wales no on-movements are permitted unless there is a satisfactory veterinary risk assessment. This can only be considered after the completion of the first official test and all reactors identified at that test have been removed. In NI inward movements are prohibited for as long

as is deemed appropriate subject to veterinary risk assessment/discretion.

- A DNA eartag will be applied at the time of disclosure (or valuation in NI) and a random or targeted number will be followed up by DNA matching samples taken following the slaughter of the reactor. This is to ensure that the TB reactor animal is the one that is valued and slaughtered.
- Additionally, throughout the UK, and in accordance with section 2.2.5.3.5 in Annex B to Council Directive 64/432/EEC (as amended), a more severe interpretation of the skin test will be adopted in all OTFW TB breakdowns.
- In accordance with Annex A to Council Directive 64/432/EEC (as amended), herds where OTF status has been withdrawn for disease reasons a legal Notice is served on the owner requiring cleansing and disinfection with an approved disinfectant by a specified date following the removal of any test reactors or 'affected' animals. In addition in NI, the same procedure applies to herds where OTF status has been suspended for disease reasons.
- Herdkeepers and hauliers contracted to transport the reactors to slaughter will be required to comply with legislation. After unloading the animals, vehicles must be fully cleansed and disinfected as soon as is reasonably practicable within 24 hours. In NI the DARD sub-contracted haulier must do so before leaving the designated abattoir.
- In NI transport of reactors is by a DARD sub-contracted haulier to a single DARD contracted abattoir under strict biosecurity conditions. In England and Wales, reactors are collected and slaughtered at a limited number of slaughterhouses under contracts.
- Specific verbal and written advice on epidemiology, public health and biosecurity is provided by the OV or VO to the herdkeeper.
- Case conferences may be held, if the OV or VO considers it necessary.
- In Wales, the Cymorth TB project which has been underway since October 2013 offers those farmers whose herds are under restriction, additional bespoke advice through their own Official Veterinarian (OV) with the aim of restoring Officially TB Free Status at the earliest opportunity.
- In NI, all herd keepers adjoining OTW breakdowns are identified, alerted of the risk, and their herds may undergo a short interval testing cycle following veterinary risk assessment. They are tested at 4 monthly intervals until there is no further risk of lateral spread. If the test is not completed on time, OTS is applied. The DARD Veterinary Service Staff instructions state that a Veterinary Officer may also decide to set risk tests for herds contiguous to an OTS breakdown or contiguous to a backward-traced herd on the basis of disease risk. They also make it clear that in any area where there is a high incidence of TB or a sudden increase in TB levels, blanket herd testing may be introduced, and set out conditions for implementation of same.
- Furthermore, for OTFW breakdowns in the Low Risk and parts of the Edge Areas of England, 3km radial testing will take place to establish that there has not been localised spread of infection. Herds will be subject to an immediate check test of all animals over 42 days of age. If this initial check test is negative, the herd will be marked forward for an additional test 6 months later. Following a clear test herds in the edge area will revert to annual testing. In the low risk area an additional 12-month check test will be required, as a minimum, before reverting to the default 4-yearly testing frequency for the low incidence area. Pre-movement testing is required in such herds until the radial testing regime has been completed in the herd.
- 129. Forward tracing of animals from OTFW breakdowns is carried out under parameters determined by an OV or VO. If it is impossible to test the traced animal, due to either its death or having been previously exported, a herd test may be set subject to veterinary risk assessment/discretion. Where a traced animal has been exported live prior to being identified as a traced animal, the Competent Authority of the appropriate Member State is informed, subject in some cases to pre-conditions specified by the recipient Competent Authority.

130. In NI, herds through which TB reactors move are tested according to VO assessed risk. These herds lose OTF status until appropriate testing is completed.

4.4.9.2 Procedures for restoration of OTF status

131. OTFS (OTS in NI) status is removed from a herd where:

- There is completion of an overdue herd test
- If evidence of M. bovis infection cannot be demonstrated by PME and culture in GB, and PME, histology or culture in NI, in any of the slaughtered reactors, OTF herd status will remain suspended and may be restored after a single skin test of all the animals over 42 days old in GB (NI entire herd) in the herd with negative results in accordance with Annex A (3A) to Council Directive 64/432/EEC (as amended)
- Cleansing and disinfection procedures are completed as required.
- In NI, all suspended herds (due to disease) are subject to cleansing and disinfection inspection. No such herd will regain OTF status unless cleansing and disinfection is inspected and is approved.
- In England, any breakdown herds that are contiguous to an ongoing OTFW breakdown, or have had their OTF status withdrawn in the preceding three years, will require two (not one) consecutive skin herd tests with negative results before regaining OTF status. Additionally, in the edge area, all OTFS herds will require two (not one) consecutive skin herd tests with negative results before regaining OTF status.

 132. OTFW (OTW in NI) status is removed from a herd where:
- Two consecutive clear herd skin tests have been completed in accordance with Annex A (3B) to Council Directive 64/432/EEC (as amended) and
- Cleansing and disinfection procedures are completed as required. No such herd will regain OTF status unless confirmation of cleansing and disinfection has been received.
- 133. After regaining OTF status, herds must undergo further skin check tests before going back to the normal area herd testing frequency. In former OTFW herds and the majority of OTFS herds in England and Wales, the first such test will take place 4-6 months after restoration of OTF status. In NI, all TB breakdown herds are required to complete a check test 4-6 months after restoration of OTF status. If that test is negative, a second check test takes place 12 months thereafter, unless a risk assessment demands a reduced interval.
- 134. In England, former OTFS herds located in 4 yearly testing zones will only require one follow up test with negative results between 6 and 12 months after OTF status restoration. During this period, any cattle moved out of the herd will be eligible for PrMT.
- 4.4.9.3 Stamping out the disease in heavily infected herds (depopulation)
- 135. A herd may be fully or partially depopulated if considered necessary. Depopulation will involve either the compulsory slaughter of the whole herd, or all of the cattle within specific epidemiological groups where the prevalence of infection does not justify continued skin testing. Cleansing and disinfection of depopulated holdings will be carried out to prevent reinfection and is audited. Restocking will only be allowed once the owner has taken positive measures to mitigate the risk of reinfection or a period of time has elapsed to reduce risks from residual infection on the holding.

Defra and the Welsh Government considers that whole herd depopulations are of most benefit when the disease within an area has reached a relatively low level; it is a useful tool to establish area TB freedom. Defra and the Welsh Government is committed to considering this practice when there is epidemiological evidence to suggest that herd depopulation (either partial or total) is warranted and justified on a case by case basis.

In NI, the DARD Veterinary Service staff instructions detail the approach regarding removal of negative in contact animals and herd depopulation. There is a well-defined procedure for full depopulation of herds as a means of risk reduction or control by eliminating the infection at that time, and for restocking of the herd once defined conditions are satisfied. The quoted numbers of herds depopulated in section 6.1.1 do not include herds where only partial/group removal was undertaken. Similarly the predicted numbers of herds to be depopulated in section 7.1.2.1 do not include herds where only partial/group removal would be undertaken.

4.4.10 Compensation scheme for owners of slaughtered and killed animals

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136. Compensation is paid for cattle compulsorily removed and slaughtered as part of the TB control programme.

England

- Compensation paid at the average market value of similar (i.e. same category) animals.
- The Cattle Compensation (England) Order 2012 sets out the detailed rules for the table valuation based compensation system for bovine animals.
- The Individual Ascertainment of Value (England) Order 2012 provides for individual valuation of affected bovine animals where there is inadequate supporting sales data (used only in a small minority of cases less than 1%).
- A percentage reduction in compensation may be applied if a cattle keeper fails to test his herd by prescribed deadlines.

Wales

- Compensation is currently calculated on the basis of market value in accordance with the provisions of the Tuberculosis (Wales) Order 2010.
- The Welsh Government monitors TB valuations through the use of Monitor Valuers who will scrutinise all valuations on a monthly basis, seeking justification and requesting comparable market data in all relevant cases.
- Automatic justification is required for payments that exceed £4,000 for pedigree animals or £1,800 for commercial animals.
- A percentage reduction in compensation may be applied if a cattle keeper does not adhere to TB testing requirements, fails to take appropriate action after the serving of a Veterinary Improvement Notice, or breaches the Tuberculosis (Wales) Order 2010.
- A consultation on the proposed introduction of a table valuation system closed on 22 April 2014. An announcement on next steps is expected in autumn 2014.

Northern Ireland (NI)

- Reactor animals and any relevant in contact animals are valued by DARD Valuation Unit on farm prior to slaughter. DNA tags are applied to reactor animals at test read off or at valuation.
- Compensation is made on the basis of market value directly to the herdkeeper for all classes of animals removed.
- Where a herd keeper disputes a valuation, they may seek an independent valuation by an independent valuer from a DARD approved list of valuers. This independent valuation is not final and binding, and so the herdkeeper or DARD may appeal a valuation to an independent valuation appeal panel.
- The work of the DARD Valuation Officers is subject to close monitoring and justification is required for higher value animals.
- The valuation process has recently been strengthened to include additional controls.

4.4.11 Control on the implementation of the programme and reporting

(max. 32000 chars):

137. There will be regular reporting and liaison on the delivery of different aspects of the TB programmes between the delivery bodies and the competent authorities in UK including to the UK TB Liaison Group.

138. The integrated APHA Sam IT system for England and Wales manages the TB surveillance and control

functions including immediate updates on customer records visible by all in APHA, direct transmission of TB test data through interfaces with OV practices, Food Standards Agency (FSA) meat hygiene inspectors and the TB culture laboratory, all of which have improved the quality and assurance of disease test data. 139. In NI, APHIS is used for all aspects of TB disease control. APHIS capability is used to administer between-herd movement of cattle, captured using a movement notification system and permissible movement matrix, facilitated by input at markets, abattoirs and directly via the internet by herd keepers. It facilitates management of herd-level and animal-level tests, with results recorded at animal level. Entry of test results is virtually exclusively by direct link with the testing veterinarian via a web based system onto APHIS. Abattoir and laboratory results are similarly reported immediately on APHIS. Management and quality controls

140. The Bovine TB Control Scheme in NI is run as a programme by the Veterinary Service of DARD. This is led by a Senior Principal Veterinary Officer (SPVO) supported by a dedicated team at HQ. This is supplemented with input from an in-house Veterinary Epidemiology Unit and other sources as required. Implementation and delivery of Programme disease control requirements is based at DVO level, through centralised instructions and supported by IT. Private sector contractors provide the bulk of the live animal surveillance testing under supervision.

141. Governance of the implementation of the Programme is structured. The HQ team under the Programme SPVO provide technical policy advice and translates policy decisions into instructions and training packages as required. The responsibility of seeking adequate resource lies at HQ. This team creates and monitors Key Programme Performance Indices to establish the level of delivery in each critical area.

142. The field TB Implementation Team monitor the delivery of the Programme at DVO level and individual breakdown level through audit of decision making and field processes. They report to the TB HQ Team as to the level of compliance with instructions.

143. A further central role is to conduct audit of the private sector delivery partners and in house testing personnel. This assesses delivery against required delivery targets. Specialist teams of audit trained Veterinary Officers conduct field visits, including audit of the test procedures in the field. Failure to comply fully with either contractual requirements (or staff instructions) will attract sanctions as described in a formal protocol.

Statistics

144. Defra will produce monthly updates of TB statistics for GB which will be published online at https://www.gov.uk/government/collections/bovine-tb. For NI, detailed disease statistics are published monthly at http://www.dardni.gov.uk/index/dard-statistics/animal-disease-statistics.htm.

145. Regular reports will be provided to the European Commission on progress of the disease and on the Plan (including in accordance with Article 8 of Council Directive 64/432/EEC (as amended)).

5. Benefits of the programme

A description is provided of the benefits of the programme on the economical and animal and public health points of view.

(max. 32000 chars):

146. The main generic benefits of the bovine TB Eradication Programmes in the UK are reducing the financial burden to farmers and other tax payers by improving animal health and maintaining a

sustainable farming sector, protecting human health, and safeguarding animal welfare.
Financial Benefits by improving animal health and maintaining a sustainable farming sector
147. The potential for considerable financial benefits for both the cattle sector and the Government in terms of:

- Reduction of the production losses incurred by the cattle sector as a result of removal of diseased animals or disruption following the imposition of movement restrictions.
- Reduced cost burden on the taxpayer by minimising the levels of compensation paid for animals compulsorily slaughtered and reducing future testing costs and APHA resources expended on TB issues.
- In total Government has estimated that each confirmed new breakdown costs on average around £20,000 to the Government in compensation for animals compulsorily slaughtered as reactors or dangerous contacts and in costs of testing, and about £14,000 in costs to farmers from losses of animals, farm costs of testing, and disruption to business through movement restrictions totalled net of compensation. Based on current expenditure, the forecast cost to taxpayers alone without additional intervention will exceed £1 billion over the next decade; this level of expenditure is unsustainable.

 148. Deriving from these financial benefits will be the maintenance of viable and sustainable beef and dairy sectors through improved consumer confidence in the quality and safety of produce.
- 149. As part of the continued sustainability of the sector, the UK is developing a stronger export market following the lifting of the BSE related export ban. There is also a strong dairy export market. In 2012 the value of UK exports was £1.2 billion for dairy products and £389 million for beef. An improved TB disease situation would enable greater opportunities to strengthen the export trade.

Human Health

150. There is a low risk to human health posed by M. bovis and this can be further reduced by the programme. Control of TB was one of the great public health success stories of the twentieth century. In the late 19th century TB caused 1 in 5 of deaths in the UK and even as late as the pre- and post-World War II period there were 50,000 TB notifications in England and Wales. Before World War II, 2,000 children died in the UK every year due to bTB. The implementation of BCG vaccines, pasteurisation of milk, and the reduction of the incidence of the disease in the cattle population contributed to the effective elimination of the disease as a major health issue in the developed countries.

Animal Welfare

- 151. There will be improved animal welfare through the prevention of infection and the wider societal benefits gained from the cessation of interventions relating to wildlife.
- 152. If the disease were to escalate clinically there could be significant animal welfare problems. It is not likely that these would be acceptable to a population increasingly seeking high welfare standards. This analysis of programme benefits suggests that although precise estimates cannot be made there are a number of significant benefits relative to a "no control situation".

Country Specific Benefits and Targets

- 153. The Commission Working Document SANCO/10181/2014 Rev 1 (Guidelines for the Union co-funded programmes of eradication, control and surveillance of animal diseases and zoonoses for the years 2015-2017) provides suggested ambitious targets for the reduction of disease levels for the years 2015 and 2017 against the baseline in 2012. Defra, Welsh Government and DARD have developed a series of targets for the period between 2015 and 2020, based on previous epidemiological trends.
- 154. In England and Wales, there has been a decrease in prevalence over a five-year rolling period, although there have been significant annual fluctuations within this decreasing trend (i.e. disease levels have increased as well as decreased between two years). To produce the forecasts in this Programme, the 5-year average has been calculated and applied to each year as a reduction for each year between 2015 2020. In NI historical declines in annual herd incidence, combined with recent trends, were used to provide the forecasts for annual herd incidence over the 2015 2020 period.
- 155. The targets may not be achieved for a number of reasons. The targets will be reviewed annually and

amended accordingly to reflect the latest epidemiological situation. England

156. The Programme takes into consideration the heterogeneous geographic distribution of bovine TB in the country. The disease is endemic in the South West and West Midlands of the country. The rest of the country, apart from a small, endemic enclave on the South coast (East Sussex), has a low incidence level of disease and virtually all confirmed cases of bovine TB in these low incidence areas can be traced back to livestock movements from the high incidence area. For the past 20 years, the edge of the endemic area has steadily, albeit slowly, advanced into the low incidence, non-endemic area. 157. The Strategy for Achieving "Officially Bovine Tuberculosis-Free" Status for England published on 3rd April 2014 contains the targets included in Attachment 9.

Wales

158. The Welsh Government recognises that TB eradication is a long term objective and the measures contained within this Programme are all designed to get ahead of the disease, stop it spreading, clear up infection quickly and keep herds and wider areas (such as north Wales) free of disease. It is anticipated that these measures will lead to a gradual reduction in TB incidence and prevalence and will eventually lead to the eradication of bovine TB in Wales. Achieving sustained reductions in disease in the first instance is an important milestone towards TB eradication. It is anticipated that the measures contained within this Programme will lead to these sustained reductions in incidence and prevalence.

159. The key indicators for bovine TB, disease incidence and prevalence, are unpredictable and influenced in varying degrees by many factors. The unpredictable nature of the disease makes forecasting even short term targets unreliable.

- 160. There were marked reductions in new bovine TB incidents and animals slaughtered in Wales in 2013 and these reductions appear to be continuing during 2014. However, due to the unpredictability of the disease, it is unknown whether these reductions will continue to be seen over the coming months and years. It may indeed be reasonable to propose that the current indicators suggest that improvements already made to our programme have already arrested the increase in disease.
- 161. The measures contained within this TB eradication plan are designed to continue this downward trend and we are steadily ramping up our controls in order to achieve reductions in incidence and prevalence. On this basis, in taking account of fluctuations in disease trends seen over the years, the Welsh Government is working towards achieving Officially TB Freedom in Wales by 2039.
- 162. There is no one measure that will lead to TB eradication in Wales; a comprehensive approach is required in order to tackle all sources of infection. Since 2010 all cattle herds in Wales have been subject to annual TB surveillance testing, with cattle herds in one endemic area, the Intensive Action Area (IAA) being tested every six months. This comprehensive testing strategy will continue for the foreseeable future and has yielded an important longitudinal dataset, which will be interrogated and used to make evidence based decisions to reverse the TB epidemic.
- 163. Data collected so far demonstrates that bovine TB is not distributed uniformly across Wales. The North West of Wales has a lower disease incidence than the South West and areas to the East bordering the annual testing areas in England. Exploring the distinctions and different factors affecting the incidence levels between these areas and other areas known as clusters will be a key feature of future Welsh Government policy.
- 164. Some key measures which we believe will play an important part in the process in the run up to disease eradication include:
- Annual TB testing of all cattle herds in Wales. This is a particularly important aspect of the TB Eradication Programme and we envisage will be critical in arresting the spread of infection and in the medium and long term to delivering the reductions mentioned above.
- Compulsory Pre-Movement TB testing and a tightening up of the exemptions. It is important that we continue to find infection before it has had a chance to spread.

- Badger vaccination in the Intensive Action Area and wider expansion of badger vaccination in other areas of Wales. The benefits of badger vaccination are expected to be seen within the lifetime of this Programme and the impact of any wildlife interventions will continue to be closely monitored.

 165. Continuous improvements are being made to remove disease quickly and efficiently from farms and to support farmers in achieving OTF status. Key initiatives to support this include:
- Work to resolve long term and persistent TB breakdowns.
- Cymorth TB, designed to provide guidance to farmers to clear up infection quickly in their herds and support them towards achieving and maintaining herd Officially TB Free Status.
- The TB Epidemiologist and the work within the cluster areas have identified trends in TB epidemiology and are already informing policy development to suit the specific conditions in the clusters.
- Changing behaviours by promoting good practice and dis-incentivising poor practice through compensation is another key aspect of the Programme. This is expected to yield positive outcomes in terms of ensuring timely TB testing and implementing appropriate biosecurity practices.

 166. The enhanced control measures introduced will take time to reverse the epidemic. They have

already identified more infection and in the short term are likely to continue to do so within parts of the country. Cattle controls will continue to be central to our eradication programme. However, we recognise that within the areas of higher TB incidence there is a need to mitigate the impact that any reservoir of infection in wildlife has on the disease in cattle.

Northern Ireland (NI)

167. The main benefits of the TB programme are indicated below. The overall benefit to the NI farming and processing sectors is that the TB programme has been successful in reducing TB in cattle and in supporting trade in live cattle and products. The export trade in cattle, beef, milk and by-products, worth £1,557.5m for 2012, is dependent on the effective implementation of the programme. This figure is made up as follows:

- Live cattle exports £30.7m (including to GB)
- Animal by-products £23.2m (including to GB) cannot separate cattle data from other animals
- Beef and sheep meat £860.4m (including to GB) cannot separate data
- Milk and milk products £663.2m (including to GB)
- 168. The vast majority of herds in NI are able to participate fully in export trade because of the programme. In the absence of an effective programme, access to export markets would not be possible. Maintenance of a programme continues to be essential to provide the guarantees necessary to enable NI cattle and their products to access EU and third country markets.
- 169. Trade in live animals is governed by Council Directive 64/432/EEC (as amended). Bovine animals for export to another MS must originate from an OTF herd and have been submitted to a pre-movement test for TB.
- 170. Trade in milk is governed by Council Directive 2004/41/EC and by Regulation (EC) No. 2004/853 which establish that milk originating from herds that do not have OTF status must be heat-treated and that milk from animals showing a positive reaction must not be used for human consumption.
- 171. Trade in animal products for human consumption is governed by Directive 2004/41/EC and Regulation (EC) Nos 2004/853 and 2004/854. Meat from animals with generalized TB must not be declared fit for human consumption. In cases where lesions are confined to the lymph nodes or only one organ or only one part of the carcase, only the affected part need be declared unfit for human consumption. Maintaining access to third country markets depends on NI continuing to comply with the relevant requirements of the OIE and such conditions as may be imposed bilaterally by our trading partners.

For brucellosis (bovine and small ruminants) and tuberculosis, if an annual programme is submitted, please provide also the targets for herd incidence and prevalence, and the animal prevalence for at least 3 years (including the year for which the programme is submitted).

6. Data on the epidemiological evolution during the last five years

no

6.1 Evolution of the disease

Evolution of the disease:

○ Not applicable

○ Applicable...

6.1.1 Data on herds for year: 2013

										Indicators		
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds checked		Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence	
England	Bovines	53 676	53 676	64 398	7 245	3 868	3	0,041	119,975	11,25	6,006	х
Wales	Bovines	12 639	12 639	20 078	1 810	869	2	0,11	158,858	9,015	4,328	x

Northern Ireland	Bovines	24 098	24 098	23 868	1 901	1 479	8	0,421	99,046	7,965	6,197	x
Total		90 413	90 413	108 344	10 956	6 216	13	0,119	119,832	10,112	5,737	
									Ad	ld a new r	ow	

6.1.1 Data on herds for year: **2012**

										Indicators					
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence				
England	Bovines	53 555	53 555	63 486	6 894	3 925	2	0,029	118,544	10,859	6,182	x			
Wales	Bovines	12 721	12 721	22 210	1 904	1 112	2	0,105	174,593	8,573	5,007	x			
Northern Ireland	Bovines	25 776	25 776	23 918	2 073	1 695	17	0,82	92,792	8,667	7,087	X			
Total		92 052	92 052	109 614	10 871	6 732	21	0,193	119,078	9,918	6,142				
									Add a new row						

6.1.1 Data on herds for year: **2011**

					Indicators	

Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds checked		Number of new positive herds	Number of herds depopulated	% positi herds depopula		% herds coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence				
England	Bovines	54 288	54 288	54 120	6 373	3 771	1	C	0,016	99,691	11,776	6,968	x			
Wales	Bovines	12 821	12 821	19 113	1 758	1 045	4	C	,228	149,076	9,198	5,467	х			
Northern Ireland	Bovines	25 677	25 677	23 917	1 655	1 386	7	,	,423	93,146	6,92	5,795	x			
Total		92 786	92 786	97 150	9 786	6 202	12	C),123	104,703	10,073	6,384				
										Add a new row						

6.1.1 Data on herds for year: 2010

										Indicators					
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence				
England	Bovines	56 867	56 867	52 957	6 119	3 634	1	0,016	93,124	11,555	6,862	x			
Wales	Bovines	13 034	13 034	17 937	1 773	1 039	3	0,169	137,617	9,885	5,792	X			
Northern Ireland	Bovines	25 933	25 933	23 595	1 484	1 150	16	1,078	90,984	6,289	4,874	x			
Total		95 834	95 834	94 489	9 376	5 823	20	0,213	98,597	9,923	6,163				
									Add a new row						

6.1.1 Data on herds for year:

2009

										Indicators							
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence						
England	Bovines	57 495	57 495	50 140	6 193	3 362	1	0,016	87,208	12,351	6,705	x					
Wales	Bovines	13 249	13 249	18 424	2 116	1 186	4	0,189	139,06	11,485	6,437	x					
Northern Ireland	Bovines	26 287	26 287	24 023	1 608	1 293	12	0,746	91,387	6,694	5,382	x					
Total		97 031	97 031	92 587	9 917	5 841	17	0,171	95,42	10,711	6,309						
					,				Add a new row								

6.1.2 Data on animals for year: 2013

							Slaught	ering	Indica	ators	
Region	Animal species	Total number of animals	Number of animals to be tested under the programme	Number of animal tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence	
England	Bovines	5 312 017	5 312 017	6 272 732	6 272 732	25 747	25 747	26 603	118,086	0,41	х

Wales	Bovines	1 100 864	1 100 864	1 943 517	1 943 517	5 883	5 883	6 102	176,545	0,3	X
Northern Ireland	Bovines	1 587 766	1 568 589	1 620 056	1 620 056	8 271	8 271	9 374	103,281	0,51	х
Total		8 000 647	7 981 470	9 836 305	9 836 305	39 901	39 901	42 079	123,24	0,41	
			ADD	A NEW R	ROW						

6.1.2 Data on animals for year: 2012

							Slaught	ering	Indic	ators			
Region	Animal species	Total number of animals	Number of animals to be tested under the programme	Number of animal tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence			
England	Bovines	5 295 893	5 295 893	5 855 743	5 855 743	27 742	27 740	28 286	110,571	0,47	х		
Wales	Bovines	1 106 950	1 106 950	1 948 378	1 948 378	8 900	8 900	9 287	176,013	0,46	х		
Northern Ireland	Bovines	1 625 446	1 625 446	1 643 511	1 643 511	10 896	10 896	12 290	101,111	0,66	х		
Total		8 028 289	8 028 289	9 447 632	9 447 632	47 538	47 536	49 863	117,68	0,5			
								ADD A NEW ROW					

6.1.2 Data on animals for year: 2 011

							Slaught	ering	Indica	ators	
Region	Animal species	Total number of animals	Number of animals to be tested under the programme	Number of animal tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence	
England	Bovines	5 267 474	5 267 474	5 495 911	5 495 911	25 870	25 870	26 469	104,337	0,47	Х
Wales	Bovines	1 101 673	1 101 673	1 862 102	1 862 102	7 460	7 460	8 068	169,025	0,4	х
Northern Ireland	Bovines	1 590 452	1 590 452	1 607 358	1 607 358	8 136	8 136	8 620	101,063	0,51	X
Total		7 959 599	7 959 599	8 965 371	8 965 371	41 466	41 466	43 157	112,64	0,46	
				ADD	A NEW F	ROW					

6.1.2 Data on animals for year: 2010

							Slaught	tering	Indic	ators	
			Number of animals to be tested under the		Number of animals tested	Number of positives	Number of animals with positive result slaughtered or		% coverage at		
Region	Animal species	animals	programme	animal tested	individually	animals	culled	slaughtered	animal level	prevalence	

England	Bovines	5 649 802	5 649 802	5 367 432	5 367 432	23 895	23 895	24 601	95,00	2		,45	X
Wales	Bovines	1 165 041	1 165 041	1 848 225	1 848 225	7 237	7 237	7 619	158,6	4	7/0	,39	X
Northern Ireland	Bovines	1 604 356	1 604 356	1 582 878	1 582 878	6 404	6 404	7 144	98,66	1		0,4	X
Total		8 419 199	8 419 199	8 798 535	8 798 535	37 536	37 536	39 364	104,5	1	C	,43	
						ADD	A NEW	RO	W				

6.1.2 Data on animals for year: 2 009

							Slaught	ering	Indic	Indicators		
Region	Animal species	Total number of animals	Number of animals to be tested under the programme	Number of animal tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence		
England	Bovines	5 465 000	5 465 000	4 829 190	4 829 190	25 539	25 539	26 669	88,366	0,53	х	
Wales	Bovines	1 117 000	1 117 000	1 793 641	1 793 641	10 872	10 872	11 671	160,577	0,61	X	
Northern Ireland	Bovines	1 612 813	1 612 813	1 601 500	1 601 500	8 198	8 198	8 905	99,299	0,51	X	
Total		8 194 813	8 194 813	8 224 331	8 224 331	44 609	44 609	47 245	100,36	0,54		
	<u></u>		1 / / / / / /			v / / / /		ADD A NEW ROW				

Standard	l requirements	for th	ne submission of	progra	mme for	eradication.	control a	and monitoring
Staridard	i i cquii ciriciita	101 11	ic subillission of	progra		Ci dalcation,	COLLEGE	

- 6.2 Stratified data on surveillance and laboratory tests
- 6.2.1 Stratified data on surveillance and laboratory tests for year: 2013

Region	Animal Species	Test Type	Test Description	Number of samples tested	Number of positive samples	
England	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	34 338	1 493	X
Wales	Bovine	serological test	In-vitro (IFN-gamma or Bo	12 095	873	Х
Northern Ireland	Bovine	serological test	In-vitro (IFN-gamma or Bo	16 913	940	Х
England	Bovine	microbiological or virological tes	Bacteriological culture	9 140	4 884	X
Wales	Bovine	microbiological or virological tes	Bacteriological culture	2 655	650	Х
Northern Ireland	Bovine	microbiological or virological tes	Lowenstein - Jensen and	3 170	667	Х
Total			_	78 311		
				ADD A NEW ROW		

6.2.1 Stratified data on surveillance and laboratory tests for year: 2012

Region	Animal Species	Test Type	Test Description	Number of samples tested	Number of positive samples	
England	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	26 209	860	х
England	Bovine	microbiological or virological tes	Bacteriological culture	9 630	5 203	х
Wales	Bovine	serological test	In-vitro (IFN-gamma or Bo	9 081	651	х
Wales	Bovine	microbiological or virological tes	Bacteriological culture	3 643	938	х
Northern Ireland	Bovine	serological test	In-vitro (IFN-gamma or Bo	16 162	980	х
Northern Ireland	Bovine	microbiological or virological tes	Lowenstein - Jensen and	3 584	728	х
Total				68 309		
				ADD A NEW ROW		

6.2.1 Stratified data on surveillance and laboratory tests for year: 2011

Region	Animal Species	Test Type	Test Description	Number of samples tested	Number of positive samples	
England	Bovine	serological test	In-vitro (IFN-gamma or B⊖	16 197	567	x
England	Bovine	microbiological or virological tes	Bacteriological culture	9 606	4 955	х

Wales	Bovine	serological test	In-vitro (IFN-gamma or Bဋ္	7 413	627	x
Wales	Bovine	microbiological or virological tes	Bacteriological culture	3 004	830	x
Northern Ireland	Bovine	serological test	In-vitro (IFN-gamma or Bဌာ	17 123	854	х
Northern Ireland	Bovine	microbiological or virological tes	Lowenstein - Jensen and	2 700	642	х
Total				56 043		
				ADD A N	EW ROW	

6.2.1 Stratified data on surveillance and laboratory tests for year: 2010

Region	Animal Species	Test Type	Test Description	Number of samples tested	Number of positive samples	
England	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	16 269	509	х
England	Bovine	microbiological or virological tes	Bacteriological culture	8 632	4 398	х
Wales	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	7 757	548	х
Wales	Bovine	microbiological or virological tes	Bacteriological culture	2 515	842	х
Northern Ireland	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	13 520	661	х
Northern Ireland	Bovine	microbiological or virological tes	Lowenstein - Jensen and	3 887	751	х
Northern Ireland	Bovine	other test	VNTR	781	742	х
Total				53 361		
				ADD A N	EW ROW	

6.2.1 Stratified data on surveillance and laboratory tests for year: 2009

Region	Animal Species	Test Type	Test Description	Number of samples tested	Number of positive samples	
England	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	18 384	1 856	х
England	Bovine	microbiological or virological tes	Bacteriological culture	9 503	4 118	Х
Wales	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	7 063	1 217	X
Wales	Bovine	microbiological or virological tes	Bacteriological culture	4 007	1 001	х
Northern Ireland	Bovine	serological test	In-vitro (IFN-gamma or Bဝူ	14 657	1 279	Х
Northern Ireland	Bovine	microbiological or virological tes	Lowenstein - Jensen and	6 234	992	Х
Northern Ireland	Bovine	other test	VNTR	922	977	х
Total				60 770		
				ADD A NEW ROW		

6.3	Data on infection		
	Data on infection	○ Not applicable	○ Applicable

6.3 Data on infection at the end of year:

2013

Region	Animal Species	Number of herds infected	Number of animals infected	
England	Bovines	3 868	25 747	X
Wales	Bovines	868	5 883	X
Northern Ireland	Bovines	1 644	4 343	X
Total		6 380	35 973	
			Add a new row	

6.3 Data on infection at the end of year:

Region	Animal Species	Number of herds infected	Number of animals infected	
England	Bovines	3 931	27 740	X
Wales	Bovines	1 112	8 900	Х
Northern Ireland	Bovines	1 738	5 434	Х
Total		6 781	42 074	
			Add a new row	

6.3 Data on infection at the end of year:

2011

Region	Animal Species	Number of herds infected	Number of animals infected	
England	Bovines	3 754	25 809	X
Wales	Bovines	1 045	7 460	X
Northern Ireland	Bovines	1 390	4 425	Х
Total		6 189	37 694	
			Add a new row	

6.3 Data on infection at the end of year:

Region	Animal Species	Number of herds infected	Number of animals infected	
England	Bovines	3 634	23 897	X
Wales	Bovines	1 039	7 237	X
Northern Ireland	Bovines	1 229	3 393	Х
Total		5 902	34 527	
			Add a new row	

6.3 Data on infection at the end of year:

2009

Region	Animal Species	Number of herds infected	Number of animals infected	
England	Bovines	3 350	24 500	Х
Wales	Bovines	1 186	10 872	Х
Northern Ireland	Bovines	1 346	3 972	Х
Total		5 882	39 344	
			Add a new row	

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Data on the status of herds:

 \bigcirc Not applicable

○ Applicable...

6.4 Data on the status of herds at the end of year:

2013

Status of herds and animals under the programme

					Status	s of nerds an	d animais un	der the progr	amme							
						Not Free	e or not officia	ally free from	disease							
		Total numb and animals progra		Unkr	nown	Last chec	k positive	Last check n	egative	Free or off from disea suspe	se status	Free from	ı disease	Officially dise		
Region	Animal Species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England	Bovines	53 676	5 312 017	0	0	0	0	0	0	0	0	0	0	0	0	Х
Vales	Bovines	12 639	1 100 864	0	0	439	38 237	0	0	430	37 453	306	26 653	11 464	998 521	Х
Northern Ireland	Bovines	24 098	1 568 589	0	0	502	90 355	793	89 002	1 443	121 409	0	0	21 360	1 267 823	Х
Total		90 413	7 981 470	0	0	941	128 592	793	89 002	1 873	158 862	306	26 653	32 824	2 266 344	
											F	Add a n	ew row	,		

Data on the status of herds at the end of year: 2012

					Status	s of herds an	d animals ur	nder the progr	amme							
						Not Free	e or not offici	ally free from	disease							
		Total numb and animal progra		Unkr	nown	Last chec	k positive	Last check r	negative		icially free ase status ended	Free fron	n disease	Officially dise	free from ase	
Region	Animal Species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England - HRA	Bovines	24 792	0	2	0	2 486	0	0	0	362	0	0	0	21 942	0	х
England - Edge	Bovines	7 722	0	0	0	98	0	0	0	32	0	0	0	7 642	0	X

					Statu	s of herds an	d animals un	der the progr	amme							
England - LRA	Bovines	21 071	0	1	0	37	0	0	0	18	0	0	0	21 015	0	X
Wales	Bovines	12 721	1 106 950	0	0	567	49 339	0	0	545	47 425	526	45 771	11 083	964 415	X
Northern Ireland	Bovines	25 776	1 568 191	0	0	521	85 854	904	103 186	1 739	145 706	0	0	22 612	1 233 455	Х
Total	•	92 082	2 675 141	3	0	3 709	135 193	904	103 186	2 696	193 131	526	45 771	84 294	2 197 870	
											1	Add a n	ew row	1		

6.4 Data on the status of herds at the end of year: 2011

					Statu	s of herds an	d animals un	der the progr	amme							
						Not Free	e or not offici	ally free from	disease							
		Total numb and animal progra		Unkı	nown	Last chec	k positive	Last check n	egative	Free or off from disea suspe	ase status	Free fron	n disease	Officially dise		
Region	Animal Species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England - HRA	Bovines	25 203	0	4	0	2 346	0	0	0	379	0	0	0	22 474	0	X
England - Edge	Bovines	7 974	0	1	0	89	0	0	0	38	0	0	0	7 846	0	X
England - LRA	Bovines	21 147	0	0	0	23	0	0	0	18	0	0	0	21 106	0	X
Wales	Bovines	12 821	1 101 673	0	0	502	43 135	0	0	543	46 658	1 028	88 333	10 748	923 546	X
Northern Ireland	Bovines	25 677	1 565 646	0	0	509	88 022	838	89 656	1 573	133 706	0	0	22 757	1 254 262	X
Total	1	92 822	2 667 319	5	0	3 469	131 157	838	89 656	2 551	180 364	1 028	88 333	84 931	2 177 808	

Status of herds and animals under the programme		
	Add a new row	

6.4 Data on the status of herds at the end of year: 2010

						Not Erec	or not offici	ally free from	disease -							
		Total numb and animals progra	s under the	Unkn	own	Last chec		Last check n		Free or off from disea suspe	ase status	Free from	n disease	Officially to	free from ease	
Region	Animal Species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England- HRA	Bovines	25 965	0	0	0	2 080	0	0	0	320	0	0	0	23 565	0	Х
England - Edge	Bovines	8 443	0	0	0	63	0	0	0	46	0	0	0	8 334	0	Х
England - LRA	Bovines	22 107	0	0	0	29	0	0	0	24	0	0	0	22 054	0	Х
Wales	Bovines	13 034	1 165 041	0	0	513	45 854	0	0	526	47 016	442	39 508	11 553	1 032 662	Х
Northern Ireland	Bovines	25 933	1 583 229	0	0	245	59 274	741	90 811	1 872	148 740	0	0	23 075	1 284 404	Х
Total		95 482	2 748 270	0	0	2 930	105 128	741	90 811	2 788	195 756	442	39 508	88 581	2 317 066	
											F	Add a n	ew row	,		

Data on the status of herds at the end of year: 2009

						Not Free	or not officia	ally free from	disease							
		Total numb and animals progra	under the	Unkr	nown	Last chec	k positive	Last check n	egative	Free or off from disea suspe	ase status	Free fron	n disease	Officially dise	free from ease	
Region	Animal Species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England - HRA	Bovines	26 660	0	1	0	2 030	0	0	0	291	0	0	0	24 338	0	X
England - Edge	Bovines	8 353	0	0	0	53	0	0	0	46	0	0	0	8 254	0	X
England - LRA	Bovines	22 364	0	0	0	27	0	0	0	13	0	0	0	22 324	0	X
Wales	Bovines	13 249	1 117 000	0	0	553	46 622	0	0	633	53 367	194	16 536	11 869	1 000 655	X
Northern Ireland	Bovines	26 287	1 599 025	0	0	412	78 238	673	76 759	1 985	174 685	0	0	23 201	1 269 343	X
Total		96 913	2 716 025	1	0	3 075	124 860	673	76 759	2 968	228 052	194	16 536	89 986	2 269 998	
		1					1 <u>//</u> //				-	Add a n	ew row			Г

6.5 Data on vaccination or treatment programmes

Data on vaccination or treatment programmes is ONot applicable Applicable...

6.6 Data on wildlife

Data on Wildlife is: ONot applicable Applicable...

6.6.1 Estimation of wildlife population for year: **2013**

Region	Species	Method of estimation	Estimation of the population	
England	badger	National survey 1994 - 1997	234 000	X
Northern Ireland	badger	Scientific field survey and analysis 2007 - 2008	33 500	х
UK	Wild deer	As previous years	1 545 000	х
Wales	badger	National survey 1994 - 1997	42 000	х

-			
		ADD A NEW ROW	
		ADD A HEIT ROTT	4

6.6.1 Estimation of wildlife population for year: **2012**

Region	Species	Method of estimation	Estimation of the population	
England	badger	National survey 1994 - 1997	234 000	X
Wales	badger	National survey 1994 - 1997	42 000	X
Northern Ireland	badger	Scientific field survey and analysis 2007 - 2008	33 500	X
UK	Deer (red)	National survey 2007 reported in UK Parliamentary Office of Science a	350 000	X
UK	Deer (Fallow)	As above	200 000	х
UK	Deer (Sika)	As above	35 000	X
UK	Deer (Roe)	As above	800 000	Х
UK	Deer (Muntjac)	As above	150 000	X
UK	Deer (Chinese Water Deer)	As above	10 000	X
			ADD A NEW ROW	

6.6.1 Estimation of wildlife population for year: **2011**

Region	Species	Method of estimation	Estimation of the population	
England	badger	National survey 1994 - 1997	234 000	X
Wales	badger	National survey 1994 - 1997	42 000	X
Northern Ireland	badger	Scientific field survey and analysis 2007 - 2008	33 500	X
UK	Deer (total population see 2012 f	National survey 2007 reported in UK Parliamentary Office of Science a	1 545 000	X
			ADD A NEW ROW	

6.6.1 Estimation of wildlife population for year: **2010**

Region	Species	Method of estimation	Estimation of the population	
England	badger	National survey 1994 - 1997	234 000	X
Wales	badger	National survey 1994 - 1997	42 000	X
Northern Ireland	badger	Scientific field survey and analysis 2007 - 2008	33 500	Х
UK	Deer (total population see 2012 f	National survey 2007 reported in UK Parliamentary Office of Science a	1 545 000	Х
			ADD A NEW ROW	

6.6.1 Estimation of wildlife population for year: **2009**

Region	Species	Method of estimation	Estimation of the population	
England	badger	National survey 1994 - 1997	234 000	X
Wales	badger	National survey 1994 - 1997	42 000	X
Northern Ireland	badger	Scientific field survey and analysis 2007 - 2008	33 500	X
UK	Deer (total population see 2012 f	National survey 2007 reported in UK Parliamentary Office of Science a	1 545 000	X
			ADD A NEW ROW	

6.6.2 Disease surveillance and other tests in wildlife for year:

Region	Species	Test type	<u>Test</u> <u>Descri</u> ption	Number of samples tested	Number of positive samples	
Wales (IAA)	badger	other test	PME and culture - badger found dead	37	8	X
Wales	Deer	other test	PME and culture - deer surveillance project	187	5	х
Northern Ireland	badger	microbiological test	Lowenstein - Jensen and Stonebrinks solid cultur	1 110	75	x
Northern Ireland	badger	other test	Histology	69	12	х
Northern Ireland	badger	other test	post mortem	226	36	х
Northern Ireland	wild deer	microbiological test	Lowenstein - Jensen and Stonebrinks solid cultur	7	2	х
Northern Ireland	wild deer	other test	Histology	7	3	Х
Northern Ireland	wild deer	other test	Spoligotyping	10	2	х

			ADD A N	IEW ROW		
Northern Ireland	otter	other test	Spoligotyping	3	3	X
Northern Ireland	otter	other test	Histology	1	0	X
Northern Ireland	otter	microbiological test	Lowenstein - Jensen and Stonebrinks solid cultur	5	0	X

6.6.2 Disease surveillance and other tests in wildlife for year:

Region	Species	Test type	<u>Test Descri</u> ption	Number of samples tested	Number of positive samples	
Northern Ireland	badger	microbiological test	Lowenstein - Jensenculture media and Bactec M	1 207	78	X
Northern Ireland	badger	other test	Histology	68	12	x
Northern Ireland	badger	other test	Post mortem	237	35	x
Northern Ireland	wild deer	microbiological test	Lowenstein - Jensenculture media and Bactec M	11	1	x
Northern Ireland	wild deer	other test	Histology	1	1	X
Northern Ireland	wild deer	other test	Spoligotyping	1	1	x
Northern Ireland	otter	microbiological test	Lowenstein - Jensenculture media and Bactec M	23	0	X
Wales	badger	other test	PME and culture - badger found dead	26	6	x
			ADD A N	IEW ROW		

6.6.2 Disease surveillance and other tests in wildlife for year:

2011

Region	Species	Test type	<u>Test Descri</u> ption	Number of samples tested	Number of positive samples	
Northern Ireland	badger	microbiological test	Lowenstein - Jensenculture media and Bactec M	728	44	x
Northern Ireland	badger	other test	Histology	41	11	x
Northern Ireland	badger	other test	Post mortem	148	19	х
			ADD A N	IEW ROW		

6.6.2 Disease surveillance and other tests in wildlife for year:

Region	Species	Test type	<u>Test Descri</u> ption	Number of samples tested	Number of positive samples	
Wales (West)	wild deer	other test	Wild deer surveillance project (2009 - 10)	4	1	X
Wales (North)	feral goats	other test	Feral goat surveillance project (2009 - 10)	20	0	X
Northern Ireland	badger	microbiological test	Lowenstein - Jensenculture media and Bactec M	501	19	х
Northern Ireland	badger	other test	Histology	17	0	X
Northern Ireland	badger	other test	Spoligotyping	35	19	х
Northern Ireland	badger	other test	Post mortem	101	10	X
Northern Ireland	wild deer	microbiological test	Lowenstein - Jensenculture media and Bactec M	2	0	Х

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Northern Ireland	otter	other test	VNTR	2	0	X	
			ADD A N	IEW ROW			

6.6.2 Disease surveillance and other tests in wildlife for year:

2009

Region	Species	Test type	<u>Test Descri</u> ption	Number of samples tested	Number of positive samples	
Northern Ireland	badger	microbiological test	Lowenstein - Jensenculture media and Bactec M	530	13	x
Northern Ireland	badger	other test	Histology	11	0	х
Northern Ireland	badger	other test	Spoligotyping	13	11	x
Northern Ireland	badger	other test	Post mortem	102	0	х
Northern Ireland	Wild deer	microbiological test	Lowenstein - Jensenculture media and Bactec M	451	5	x
Northern Ireland	Wild deer	other test	Histology	5	3	x
Northern Ireland	Wild deer	other test	Spoligotyping	5	4	x
			ADD A N	IEW ROW		

6.6.3 Data on vaccination or treatment of wildlife for year: **2013**

Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment administered	
England	158,5	1 429	16	1 429	X

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Wales	288	1 352	1	1 352	X
			ADD	A NEW ROW	

6.6.3 Data on vaccination or treatment of wildlife for year: **2012**

Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment administered	
England	100	998	11	1 254	X
Wales	288	1 424	1	1 424	х
			ADD	A NEW ROW	

6.6.3 Data on vaccination or treatment of wildlife for year: **2011**

Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment administered	
England	118,38	773	4	773	х
			ADD	A NEW ROW	

Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment administered	
--------	-----------	--	---------------------	---	--

England	95,3	556	2	556	X
			ADD	A NEW ROW	

Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment administered	
			ADD	A NEW ROW	

7. Targets

The blocks 7.1.1, 7.1.2.1, 7.1.2.2, 7.2, 7.3.1 and 7.3.2 are repeated multiple times in case of first year submission of multiple program.

7.1 Targets related to testing (one table for each year of implementation)

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
England	tuberculin skin test	Bovines	skin test	surveillance	6 272 732	X
Wales	tuberculin skin test	Bovines	skin test	surveillance	1 943 517	X
Northern Ireland	tuberculin skin test	Bovines	skin test	surveillance	2 502 783	х
England	gamma interferon	Bovines	heparinised blood	surveillance	34 089	х
Wales	gamma interferon	Bovines	heparinised blood	surveillance	12 090	х
Northern Ireland	gamma interferon	Bovines	heparinised blood	surveillance	20 000	х
England	bacteriological	Bovines	tissue	surveillance	9 148	х

				Add a new row		
				Total	10 803 904	
Northern Ireland	histopathology	Bovines	tissue	surveillance	3 385	X
Northern Ireland	bacteriological	Bovines	tissue	surveillance	3 506	X
Wales	bacteriological	Bovines	tissue	surveillance	2 654	X

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
England	tuberculin skin test	Bovines	skin test	surveillance	6 272 732	x
Wales	tuberculin skin test	Bovines	skin test	surveillance	1 943 517	X
Northern Ireland	tuberculin skin test	Bovines	skin test	surveillance	2 490 269	x
England	gamma interferon	Bovines	heparinised blood	surveillance	34 089	х
Wales	gamma interferon	Bovines	heparinised blood	surveillance	12 090	x
Northern Ireland	gamma interferon	Bovines	heparinised blood	surveillance	20 000	x
England	bacteriological	Bovines	tissue	surveillance	9 148	X
Wales	bacteriological	Bovines	tissue	surveillance	2 654	х
Northern Ireland	bacteriological	Bovines	tissue	surveillance	3 488	X

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Northern Ireland	histopathology	Bovines	tissue	surveillance	3 368	X
				Total	10 791 355	
				Add a new r	ow	

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
England	tuberculin skin test	Bovines	skin test	surveillance	6 272 732	х
Wales	tuberculin skin test	Bovines	skin test	surveillance	1 943 517	х
Northern Ireland	tuberculin skin test	Bovines	skin test	surveillance	2 487 779	х
England	gamma interferon	Bovines	heparinised blood	surveillance	34 089	х
Wales	gamma interferon	Bovines	heparinised blood	surveillance	12 090	х
Northern Ireland	gamma interferon	Bovines	heparinised blood	surveillance	20 000	х
England	bacteriological	Bovines	tissue	surveillance	9 148	х
Wales	bacteriological	Bovines	tissue	surveillance	2 654	х
Northern Ireland	bacteriological	Bovines	tissue	surveillance	3 485	х
Northern Ireland	histopathology	Bovines	tissue	surveillance	3 365	х
				Total	10 788 859	

		Add a new row	
	1		

7.1.1 Targets on diagnostic tests for year:

2018

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
England	tuberculin skin test	Bovines	skin test	surveillance	6 272 732	х
Wales	tuberculin skin test	Bovines	skin test	surveillance	1 943 517	х
Northern Ireland	tuberculin skin test	Bovines	skin test	surveillance	2 485 291	х
England	gamma interferon	Bovines	heparinised blood	surveillance	34 089	х
Wales	gamma interferon	Bovines	heparinised blood	surveillance	12 090	х
Northern Ireland	gamma interferon	Bovines	heparinised blood	surveillance	20 000	х
England	bacteriological	Bovines	tissue	surveillance	9 148	х
Wales	bacteriological	Bovines	tissue	surveillance	2 654	х
Northern Ireland	bacteriological	Bovines	tissue	surveillance	3 481	х
Northern Ireland	histopathology	Bovines	tissue	surveillance	3 361	х
				Total	10 786 363	
				Add a new r	ow	

2019

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
England	tuberculin skin test	Bovines	skin test	surveillance	6 272 732	х
Wales	tuberculin skin test	Bovines	skin test	surveillance	1 943 517	х
Northern Ireland	tuberculin skin test	Bovines	skin test	surveillance	2 482 806	х
England	gamma interferon	Bovines	heparinised blood	surveillance	34 089	х
Wales	gamma interferon	Bovines	heparinised blood	surveillance	12 090	х
Northern Ireland	gamma interferon	Bovines	heparinised blood	surveillance	20 000	х
Wales	bacteriological	Bovines	tissue	surveillance	2 654	х
Northern Ireland	bacteriological	Bovines	tissue	surveillance	3 478	х
Northern Ireland	histopathology	Bovines	tissue	surveillance	3 358	х
England	bacteriological	Bovines	tissue	surveillance	9 148	х
				Total	10 783 872	
				Add a new r	'ow	

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
England	tuberculin skin test	Bovines	skin test	surveillance	6 272 732	x
Wales	tuberculin skin test	Bovines	skin test	surveillance	1 943 517	х
Northern Ireland	tuberculin skin test	Bovines	skin test	surveillance	2 480 323	х
England	gamma interferon	Bovines	heparinised blood	surveillance	34 089	х
Wales	gamma interferon	Bovines	heparinised blood	surveillance	12 090	х
Northern Ireland	gamma interferon	Bovines	heparinised blood	surveillance	20 000	x
England	bacteriological	Bovines	tissue	surveillance	9 148	x
Wales	bacteriological	Bovines	tissue	surveillance	2 654	x
Northern Ireland	bacteriological	Bovines	tissue	surveillance	3 474	х
Northern Ireland	histopathology	Bovines	tissue	surveillance	3 355	x
				Total	10 781 382	
				Add a new r	ow	

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on testing herds

○ Not applicable

○*Applicable...*

7.1.2.1 Targets on the testing of herds for year: **2015**

										Target indicators		
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
England	Bovines	53 676	53 676	64 398	6 789	3 374	3	0,04	119,98	10,54	5,24	X
Wales	Bovines	12 639	12 639	20 078	1 696	758	2	0,12	158,86	8,45	3,78	X
Northern Ireland	Bovines	23 618	23 618	23 393	1 575	1 225	15	0,95	99,05	6,73	5,24	X
Total	1	89 933	89 933	107 869	10 060	5 357	20	0	119,94	9,33	4,97	
									Ad	d a new r	ow	

										Target indicators		
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
England	Bovines	53 676	53 676	64 398	6 571	3 152	3	0,05	119,98	10,2	4,89	Х
Wales	Bovines	12 639	12 639	20 078	1 642	708	2	0,12	158,86	8,18	3,53	X
Northern Ireland	Bovines	23 382	23 382	23 159	1 416	1 101	15	1,06	99,05	6,11	4,75	X
Total	1	89 697	89 697	107 635	9 629	4 961	20	0	120	8,95	4,61	
									Ad	d a new r	ow	

										Target indicators	;	
Region	Animal species	Total number of herds	Total number of herds under the programme		Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
England	Bovines	53 676	53 676	64 398	6 361	2 944	3	0,05	119,98	9,88	4,57	X
Wales	Bovines	12 639	12 639	20 078	1 589	661	2	0,13	158,86	7,91	3,29	Х
Northern Ireland	Bovines	23 148	23 148	22 928	1 373	1 068	15	1,09	99,05	5,99	4,66	x

Total	89 463	89 463	107 404	9 323	4 673	20 0	120,05 8,68	4,35
							Add a new ro	ow .

7.1.2.1 Targets on the testing of herds for year: **2018**

										Target indicators		
Region	Animal species	Total number of herds	Total number of herds under the programme		Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
England	Bovines	53 676	53 676	64 398	6 158	2 749	3	0,05	119,98	9,56	4,27	X
Wales	Bovines	12 639	12 639	20 078	1 538	618	2	0,13	158,86	7,66	3,08	X
Northern Ireland	Bovines	22 917	22 917	22 698	1 331	1 036	15	1,13	99,04	5,86	4,56	x
Tota	I	89 232	89 232	107 174	9 027	4 403	20	0	120,11	8,42	4,11	
									Ad	d a new r	ow	

l arget indicators	Target indicators					

Region	Animal species		Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
England	Bovines	53 676	53 676	64 398	5 961	2 568	3	0,05	119,98	9,26	3,99	Х
Wales	Bovines	12 639	12 639	20 078	1 489	577	2	0,13	158,86	7,42	2,87	Х
Northern Ireland	Bovines	22 688	22 688	22 471	1 290	1 004	15	1,16	99,04	5,74	4,47	X
Total		89 003	89 003	106 947	8 740	4 149	20	0	120,16	8,17	3,88	
									Ad	d a new r	ow	

										Target indicators	:	
Region	Animal species	Total number of herds	Total number of herds under the programme	herds expected		Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
England	Bovines	53 676	53 676	64 398	5 770	2 398	3	0,05	119,98	8,96	3,72	X
Wales	Bovines	12 639	12 639	20 078	1 441	539	2	0,14	158,86	7,18	2,68	X
Northern Ireland	Bovines	22 461	22 461	22 247	1 250	972	15	1,2	99,05	5,62	4,37	X
Total	1	88 776	88 776	106 723	8 461	3 909	20	0	120,22	7,93	3,66	

				Add a now row	
				Add a new row	

7.1.2.2 Targets on testing animals

○ Not applicable

 $\bigcirc \textit{Applicable...}$

7.1.2.2 Targets on the testing of animals for year : **2015**

							Slaugl	ntering	Target ir	ndicators			
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)			
England	Bovine	5 312 017	5 312 017	6 272 732	6 272 732	21 603	21 603	22 321	118,09	0,34	х		
Wales	Bovine	1 100 864	1 100 864	1 943 517	1 943 517	4 936	4 936	5 120	176,54	0,25	х		
Northern Ireland	Bovine	1 600 000	1 600 000	1 580 000	1 580 000	7 247	7 247	8 350	98,75	0,46	X		
Total		8 012 881	8 012 881	9 796 249	9 796 249	33 786	33 786	35 791	122,26	0,34			
								Add a new row					

7.1.2.2 Targets on the testing of animals for year : **2016**

							Slaugl	ntering	Target ii	ndicators			
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)			
England	Bovine	5 312 017	5 312 017	6 272 732	6 272 732	19 789	19 789	20 446	118,09	0,32	Х		
Wales	Bovine	1 100 864	1 100 864	1 943 517	1 943 517	4 522	4 522	4 690	176,54	0,23	X		
Northern Ireland	Bovine	1 600 000	1 600 000	1 580 000	1 580 000	7 211	7 211	8 314	98,75	0,46	X		
Total		8 012 881	8 012 881	9 796 249	9 796 249	31 522	31 522	33 450	122,26	0,32			
								Add a new row					

7.1.2.2 Targets on the testing of animals for year: **2017**

							Slaugh	ntering	Target ii	ndicators	
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals		Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)	
England	Bovine	5 312 017	5 312 017	6 272 732	6 272 732	18 126	18 126	18 729	118,09	0,29	X

Wales	Bovine	1 100 864	1 100 864	1 943 517	1 943 517	4 142	4 142	4 296	0,21	X
Northern Ireland	Bovine	1 600 000	1 600 000	1 580 000	1 580 000	7 204	7 204	8 307	0,46	X
Total		8 012 881	8 012 881	9 796 249	9 796 249	29 472	29 472	31 332 123	2,26	
								Add a new	row	

7.1.2.2 Targets on the testing of animals for year: **2018**

							Slaug	htering	Target ir	ndicators					
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)					
England	Bovine	5 312 017	5 312 017	6 272 732	6 272 732	16 604	16 604	17 156	118,09	0,26	X				
Wales	Bovine	1 100 864	1 100 864	1 943 517	1 943 517	3 794	3 794	3 935	176,54	0,2	X				
Northern Ireland	Bovine	1 600 000	1 600 000	1 580 000	1 580 000	7 197	7 197	8 300	98,75	0,46	X				
Total		8 012 881	8 012 881	9 796 249	9 796 249	27 595	27 595	29 391	122,26	0,28					
								Ac	Add a new row						

7.1.2.2 Targets on the testing of animals for year: **2019**

		Slaughtering	Target indicators	4

Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)				
England	Bovine	5 312 017	5 312 017	6 272 732	6 272 732	15 209	15 209	15 715	118,09	0,24	X			
Wales	Bovine	1 100 864	1 100 864	1 943 517	1 943 517	3 475	3 475	3 605	176,54	0,18	X			
Northern Ireland	Bovine	1 600 000	1 600 000	1 580 000	1 580 000	7 190	7 190	8 293	98,75	0,46	X			
Total		8 012 881	8 012 881	9 796 249	9 796 249	25 874	25 874	27 613	122,26	0,26				
								Ad	Add a new row					

7.1.2.2 Targets on the testing of animals for year: **2020**

							Slaug	htering	Target in	ndicators				
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)				
England	Bovine	5 312 017	5 312 017	6 272 732	6 272 732	13 931	13 931	14 395	118,09	0,22	х			
Wales	Bovine	1 100 864	1 100 864	1 943 517	1 943 517	3 183	3 183	3 302	176,54	0,16	X			
Northern Ireland	Bovine	1 600 000	1 600 000	1 580 000	1 580 000	7 182	7 182	8 285	98,75	0,45	х			
Total		8 012 881	8 012 881	9 796 249	9 796 249	24 296	24 296	25 982	122,26	0,25				
								Ad	Add a new row					

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7.2 Targets on qualification of herds and animals

 $Targets \ on \ qualification \ of \ herds \ and \ animals \ \ \bigcirc \ Not \ applicable$

○Applicable...

							Targets	on the statu	s of herds ar	nd animals un	der the progr	amme				
						Expecte	d not free or I	not free from	disease							
Region		Total numb and animal progra	s under the	Expected	unknown	Last ched	k positive	Last check	c negative	Expected free from dis	ease status		I free from ease	Expected of from d	fficially free isease	
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England	Bovines	53 676	5 312 017	0	0	4 073	403 106	2 715	268 738	0	0	0	0	46 887	4 640 173	×
Vales	Bovines	12 639	1 100 864	0	0	1 018	88 634	678	59 089	0	0	0	0	10 943	953 140	×
Northern Ireland	Bovines	23 618	1 600 000	0	0	430	77 310	679	76 152	1 235	103 881	0	0	21 276	1 342 657	×
Total		89 933	8 012 881	0	0	5 521	569 050	4 072	403 979	1 235	103 881	0	0	79 106	6 935 970	
				Ac							Add a n	ew row	,	Г		

7.2 Targets on qualification of herds and animals for year: 2016

							Targets	on the statu	s of herds ar	nd animals un	nder the progr	amme				
						Expecte	d not free or i	not free from	disease							
Region		Total numb and animal progra	s under the	Expected	unknown	Last chec	k positive	Last checl	negative	Expected free from dis			I free from ease		fficially free isease	
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England	Bovines	53 676	5 312 017	0	0	3 943	390 207	2 629	260 138	0	0	0	0	47 015	4 661 672	X
Nales	Bovines	12 639	1 100 864	0	0	985	85 798	657	57 199	0	0	0	0	10 997	957 867	X
Northern Ireland	Bovines	23 382	1 600 000	0	0	397	71 512	628	70 441	1 142	96 090	0	0	21 215	1 361 958	X
Total		89 697	8 012 881	0	0	5 325	547 517	3 914	387 778	1 142	96 090	0	0	79 227	6 981 497	
													Add a n	ew row	1	

			Target	s on the status of herds a	nd animals under the progr	ramme				
		Expected not free or not free from disease								
	Total number of herds and animals under the programme		Last check positive	Last check negative	Expected free or officialy free from disease status suspended		Expected officially free from disease			

Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England	Bovines	53 676	5 312 017	0	0	3 817	377 720	2 544	251 814	0	0	0	0	47 315	4 682 483	X
Wales	Bovines	12 639	1 100 864	0	0	954	83 052	636	55 368	0	0	0	0	11 050	962 443	X
Northern Ireland	Bovines	23 148	1 600 000	0	0	389	70 082	615	69 032	1 119	94 168	0	0	21 025	1 366 719	X
Total	'	89 463	8 012 881	0	0	5 160	530 854	3 795	376 214	1 119	94 168	0	0	79 390	7 011 645	
												Add a new row				

							Targets	on the statu	s of herds ar	nd animals un	der the progr	amme				
						Expecte	d not free or i	not free from	disease							
		Total numb and animal progra	s under the	Expected	unknown	Last ched	k positive	Last checl	k negative	Expected free from dis	ease status		I free from ease		fficially free isease	
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England	Bovines	53 676	5 312 017	0	0	3 695	362 633	2 463	243 756	0	0	0	0	47 518	4 702 628	×
Wales	Bovines	12 639	1 100 864	0	0	923	80 395	615	53 596	0	0	0	0	11 101	966 873	×
Northern Ireland	Bovines	22 917	1 600 000	0	0	382	68 680	603	67 651	1 097	92 284	0	0	20 836	1 371 384	×
Total	•	89 232	8 012 881	0	0	5 000	511 708	3 681	365 003	1 097	92 284	0	0	79 455	7 040 885	
				Add					Add a n	ew row	/	Г				

7.2 Targets on qualification of herds and animals for year: 2019

							Targets	on the statu	s of herds ar	nd animals ur	nder the progr	amme				
						Expecte	d not free or i	not free from	disease							
		Total numb and animal progra	s under the	Expected	unknown	Last ched	k positive	Last checl	k negative	free from dis	ee or officialy sease status ended		I free from ease		fficially free isease	
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
England	Bovines	53 676	5 312 017	0	0	3 576	353 933	2 384	235 955	0	0	0	0	47 715	4 722 129	X
Wales	Bovines	12 639	1 100 864	0	0	893	77 882	596	51 881	0	0	0	0	11 150	971 161	X
Northern Ireland	Bovines	22 688	1 600 000	0	0	374	67 306	591	66 298	1 075	90 439	0	0	20 648	1 375 957	X
Total		89 003	8 012 881	0	0	4 843	499 121	3 571	354 134	1 075	90 439	0	0	79 513	7 069 247	
													Add a n	ew row	1	

			Targets on the status of herds and animals under the programme					
		Expected not free or not free from disease						
	Total number of herds and animals under the programme		Last check positive	Last check negative	Expected free or officialy free from disease status suspended		Expected officially free from disease	

												Add a new row				
Total		88 776	8 012 881	0	0	4 693	483 899	3 464	343 598	1 053	88 630	0	0	79 566	7 096 753	
Northern Ireland	Bovines	22 461	1 600 000	0	0	366	65 960	579	64 972	1 053	88 630	0	0	20 462	1 380 437	X
Wales	Bovines	12 639	1 100 864	0	0	865	75 332	577	50 221	0	0	0	0	11 198	975 311	X
England	Bovines	53 676	5 312 017	0	0	3 462	342 607	2 308	228 405	0	0	0	0	47 906	4 741 005	X
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment is

Not applicable

Applicable...

7.3.2 Targets on vaccination or treatment of wildlife is ONot applicable Applicable...

7.3.2 Targets on vaccination or treatment of wildlife for year: **2015**

		Та	Targets on vaccination or treatment programme					
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered				
England	70	595	15	595	x			
Wales	300	1 700	9	1 700	x			
Northern Ireland	100	270	1	270	x			
Total		2 565		2 565				
			Add a new row					

		Ta	argets on vaccination or treatment program	me	
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign		Total number of doses of vaccine or treatment expected to be administered	

			Add a n	Add a new row	
Total		2 565		2 565	
Northern Ireland	100	270	1	270	x
Wales	300	1 700	9	1 700	x
England	70	595	15	595	X

		Та	argets on vaccination or treatment program	me	
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered	
England	70	595	15	595	x
Wales	12	200	8	200	x
Northern Ireland	100	270	1	270	х
Total		1 065		1 065	
			Add a n	Add a new row	

7.3.2 Targets on vaccination or treatment of wildlife for year: **2018**

		Та	argets on vaccination or treatment program	me	
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered	
England	70	595	15	595	x
Wales	12	200	8	200	x
Northern Ireland	100	270	1	270	х
Total		1 065		1 065	
			Add a new row		

		Ta	argets on vaccination or treatment program	me	
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign		Total number of doses of vaccine or treatment expected to be administered	

Total		1 065		1 065	
Northern Ireland	100	270	1	270	x
Wales	12	200	8	200	X
England	70	595	15	595	x

		Та	argets on vaccination or treatment program	me	
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered	
England -	70	595	15	595	X
Wales	12	200	8	200	x
Northern Ireland	100	270	1	270	х
Total		1 065		1 065	
			Add a n	Add a new row	

8. Detailed analysis of the cost of the programme

8.1 Costs of the planned activities for year:

2015

The blocks are repeated multiple times in case of first year submission of multiple program.

To facilitate the handling of your cost data, you are kindly requested to:

- 1. Fill-in the text fields IN ENGLISH
- 2. Limit as much as possible the entries to the pre-loaded options where available.
- 3. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.

1. Testing							
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	tuberculin test	Individual animal sample/test	6 272 732	3.17	19 884 560,44	yes	X
Wales	tuberculin test	Individual animal sample/test	1 943 517	3.17	6 160 948,89	yes	X
Northern Ireland	tuberculin test	Individual animal sample/test	2 502 783	3.36	8 409 350,88	yes	X
England	gamma interferon test	Individual animal sample/test	34 089	13.55	461 905,95	yes	X
Wales	gamma interferon test	Individual animal sample/test	12 090	13.55	163 819,5	yes	X
Northern Ireland	gamma interferon test	Individual animal sample/test	20 000	12.39	247 800	yes	X
England	bacterial culture	Individual animal sample/test	9 148	88.85	812 799,8	yes	X

Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	funding requested	
4. Cleaning and disinfection						Community	
Northern Ireland	Slaughtering/culling with salvage value	Animal	8 350	1400	11,690,000	yes	x
Wales	Slaughtering/culling with salvage value	Animal	5 120	1902.74	9,742,028.8	yes	x
England	Slaughtering/culling with salvage value	Animal	22 231	1205.55	26,800,582.05	yes	x
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
3. Compensation paid to owner	ers						
					Add a new	row	
Purchase of vaccine/treatment ofanimal produc	Badger BCG vaccine	Vaccine dose	2 565	16	41040	yes	Х
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
2. Vaccines					Add a new	row	
Wales	domestic animals	Individual animal sample/test	12 090	0		yes	X
England	domestic animals	Individual animal sample/test	34 089	0	0	yes	X
Northern Ireland	domestic animals	Individual animal sample/test	20 000	0	0	yes	X
Northern Ireland	bacterial culture	Individual animal sample/test	3 506	73.96	259 303,76	yes	X
Wales	bacterial culture	Individual animal sample/test	2 654	88.85	235 807,9	yes	X

					Add a new	row	
5. Slaughtering/culling costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
		Add a new	row				
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Salvage receipts	Animal	22 231	-378.05	-8,404,429.55	yes	X
Wales	Salvage receipts	Animal	5 120	-286.61	-1,467,443.2	yes	X
Northern Ireland	Salvage receipts	Animal	8 350	-200	-1,670,000	yes	X
England	Tuberculin	Dose	6 272 732	0.14	878,182.48	yes	x
Wales	Tuberculin	Dose	1 943 517	0.14	272,092.38	yes	X
Northern Ireland	Tuberculin	Dose	2 502 783	0.14	350,389.62	yes	х
			,		Add a new	row	
	Total				74 868 739,7		

8.1 Costs of the planned activities for year:

2016

The blocks are repeated multiple times in case of first year submission of multiple program.

To facilitate the handling of your cost data, you are kindly requested to:

- 1. Fill-in the text fields IN ENGLISH
- 2. Limit as much as possible the entries to the pre-loaded options where available.
- 3. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.

1. Testing							
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	tuberculin test	Individual animal sample/test	6 272 732	3.17	19 884 560,44	yes	X
Wales	tuberculin test	Individual animal sample/test	1 943 517	3.17	6 160 948,89	yes	X
Northern Ireland	tuberculin test	Individual animal sample/test	2 490 269	3.36	8 367 303,84	yes	X
England	gamma interferon test	Individual animal sample/test	34 089	13.55	461 905,95	yes	X
Wales	gamma interferon test	Individual animal sample/test	12 090	13.55	163 819,5	yes	X
Northern Ireland	gamma interferon test	Individual animal sample/test	20 000	12.39	247 800	yes	X
England	bacterial culture	Individual animal sample/test	9 148	88.85	812 799,8	yes	X
Wales	bacterial culture	Individual animal sample/test	2 654	88.85	235 807,9	yes	x
Northern Ireland	bacterial culture	Individual animal sample/test	3 488	73.96	257 972,48	yes	X

Domestic animals	Individual animal sample/test	20 000	0	0	yes	X
Domestic animals	Individual animal sample/test	34 089	0	0	yes	x
Domestic animals	Individual animal sample/test	12 090	0	0	yes	х
				Add a new	row	
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Badger BCG vaccine	Vaccine dose	2 565	16	41040	yes	X
				Add a new	row	
ers						
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Slaughtering/culling with salvage value	Animal	20 446	1205.55	24,648,675.3	yes	X
Slaughtering/culling with salvage value	Animal	4 690	1902.74	8,923,850.6	yes	х
Slaughtering/culling with salvage value	Animal	8 314	1400	11,639,600	yes	х
				Add a new	row	
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested	
				Add a new	row	
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
	Domestic animals Specification Badger BCG vaccine Specification Slaughtering/culling with salvage value Slaughtering/culling with salvage value Slaughtering/culling with salvage value	Domestic animals Individual animal sample/test Domestic animals Individual animal sample/test	Domestic animals Individual animal sample/test 34 089 Domestic animals Individual animal sample/test 12 090 Specification Unit Number of units Badger BCG vaccine Vaccine dose 2 565 TS Specification Unit Number of units Slaughtering/culling with salvage value Animal 20 446 Slaughtering/culling with salvage value Animal 4 690 Slaughtering/culling with salvage value Animal 8 314 Specification Unit Number of units Number of units	Domestic animals Individual animal sample/test 34 089 0 Domestic animals Individual animal sample/test 12 090 0 Specification Unit Number of units Unitary cost in EUR Badger BCG vaccine Vaccine dose 2 565 16 Specification Unit Number of units Unitary cost in EUR Slaughtering/culling with salvage value Animal 20 446 1205.55 Slaughtering/culling with salvage value Animal 8 314 1400 Specification Unit Number of units Unitary cost in EUR Slaughtering/culling with salvage value Animal 4 690 1902.74 Slaughtering/culling with salvage value Unitary cost in EUR	Domestic animals Individual animal sample/test 34 089 0 0 0 Domestic animals Individual animal sample/test 12 090 0 0 0 Add a new Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Specification Unit Number of units Unitary cost in EUR Total amount in EUR Slaughtering/culling with salvage value Animal 20 446 1205.55 24,648,675.3 Slaughtering/culling with salvage value Animal 4 690 1902.74 8,923,850.6 Slaughtering/culling with salvage value Animal 8 314 1400 11,639,600 Add a new Sectification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Section Unit Number of units Unitary cost in EUR Add a new Section Unit Number of units Unitary cost in EUR Add a new Section Uni	Domestic animals Individual animal sample/test 34 089 0 0 yes Domestic animals Individual animal sample/test 12 090 0 0 yes Add a new row Add a new row Specification Unit Number of units Unitary cost in EUR Total amount in EUR requested requested animal sample/test 12 090 0 0 yes Add a new row FS Specification Unit Number of units Unitary cost in EUR Total amount in EUR requested requested animal Unitary cost in EUR Total amount in EUR requested 12 04 0 120 0.55 0 16 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.5

					Add a new	row .	
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Salvage receipts	Animal	20 446	-378.05	-7,729,610.3	yes	X
Wales	salvage receipts	Animal	4 690	-286.61	-1,344,200.9	yes	X
Northern Ireland	salvage receipts	Animal	8 314	-200	-1,662,800	yes	X
England	tuberculin	Dose	6 272 732	0.14	878,182.48	yes	X
Wales	tuberculin	Dose	1 943 517	0.14	272,092.38	yes	X
Northern Ireland	tuberculin	Dose	2 490 269	0.14	348,637.66	yes	X
					Add a new	row .	
	Total				72 608 386,02		

8.1 Costs of the planned activities for year:

The blocks are repeated multiple times in case of first year submission of multiple program.

To facilitate the handling of your cost data, you are kindly requested to:

- 1. Fill-in the text fields IN ENGLISH
- 2. Limit as much as possible the entries to the pre-loaded options where available.
- 3. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.

2017

1. Testing							
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Tuberculin test	Individual animal sample/test	6 272 732	3.15	19 759 105,8	yes	x
Wales	Tuberculin test	Individual animal sample/test	1 943 517	3.15	6 122 078,55	yes	х
Northern Ireland	Tuberculin test	Individual animal sample/test	2 487 779	3.36	8 358 937,44	yes	х
England	Gamma interferon test	Individual animal sample/test	34 089	13.55	461 905,95	yes	х
Wales	Gamma interferon test	Individual animal sample/test	12 090	13.55	163 819,5	yes	х
Northern Ireland	Gamma interferon test	Individual animal sample/test	20 000	12.39	247 800	yes	х
England	Bacterial culture	Individual animal sample/test	9 148	83.67	765 413,16	yes	х
Wales	Bacterial culture	Individual animal sample/test	2 654	83.67	222 060,18	yes	X
Northern Ireland	Bacterial culture	Individual animal sample/test	3 485	73.96	257 750,6	yes	х
Northern Ireland	Domestic animals	Individual animal sample/test	20 000	0	0	yes	X
England	Domestic animals	Individual animal sample/test	34 089	0	0	yes	х
Wales	Domestic animals	Individual animal sample/test	12 090	0	0	yes	X
					Add a new	row	
2. Vaccines						Llaine funding	
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Purchase of vaccine/treatment ofanimal produc	Badger BCG vaccine	Vaccine dose	1 065	16	17040	yes	X

					Add a new	/ row	
3. Compensation paid to ov	vners						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Slaughtering/culling with salvage value	Animal	18 729	1203.23	22,535,294.67	yes	X
Wales	Slaughtering/culling with salvage value	Animal	4 296	1901.17	8,167,426.32	yes	X
Northern Ireland	Slaughtering/culling with salvage value	Animal	8 307	1400	11,629,800	yes	X
					Add a new	row .	
4. Cleaning and disinfectio	n						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested	
					Add a new	/ row	
5. Slaughtering/culling cos	ts						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
					Add a new	/ row	
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Salvage receipts	Animal	18 729	-378.05	-7,080,498.45	yes	X
Wales	Salvage receipts	Animal	4 296	-286.42	-1,230,460.32	yes	X
Northern Ireland	Salvage receipts	Animal	8 307	-200	-1,661,400	yes	х

England	Tuberculin	Dose	6 272 732	0.14	878,182.48	yes	X
Wales	Tuberculin	Dose	1 943 517	0.14	272,092.38	yes	X
Northern Ireland	Tuberculin	Dose	2 487 779	0.14	348,289.06	yes	х
	Total				70 234 637,32		

8.1 Costs of the planned activities for year:

2018

The blocks are repeated multiple times in case of first year submission of multiple program.

To facilitate the handling of your cost data, you are kindly requested to:

- 1. Fill-in the text fields IN ENGLISH
- 2. Limit as much as possible the entries to the pre-loaded options where available.
- 3. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.

1. Testing										
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested				
England	Tuberculin test	Individual animal sample/test	5 272 732	3.15	16 609 105,8	yes	X			
Wales	Tuberculin test	Individual animal sample/test	1 943 517	3.15	6 122 078,55	yes	X			
Northern Ireland	Tuberculin test	Individual animal sample/test	2 485 291	3.36	8 350 577,76	yes	X			
England	Gamma interferon test	Individual animal sample/test	34 089	13.55	461 905,95	yes	X			

Wales	Gamma interferon test	Individual animal sample/test	12 090	13.55	163 819,5	yes	X
Northern Ireland	Gamma interferon test	Individual animal sample/test	20 000	12.39	247 800	yes	х
England	Bacterial culture	Individual animal sample/test	9 148	83.67	765 413,16	yes	x
Wales	Bacterial culture	Individual animal sample/test	2 654	83.67	222 060,18	yes	X
Northern Ireland	Bacterial culture	Individual animal sample/test	3 481	73.96	257 454,76	yes	x
Northern Ireland	Domestic animals	Individual animal sample/test	20 000	0	0	yes	x
England	Domestic animals	Individual animal sample/test	34 089	0	0	yes	х
Wales	Domestic animals	Individual animal sample/test	12 090	0	0	yes	Х
					Add a new	row	
2. Vaccines							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Purchase of vaccine/treatment ofanimal produc	Badger BCG vaccine	Vaccine dose	1 065	16	17040	yes	X
					Add a new	row	
3. Compensation paid to owner	ers						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Slaughtering/culling with salvage value	Animal	17 156	1203.23	20,642,613.88	yes	x
Wales	Slaughtering/culling with salvage value	Animal	3 935	1901.17	7,481,103.95	yes	x
Northern Ireland	Slaughtering/culling with salvage value	Animal	8 300	1400	11,620,000	yes	X

					Add a new	row	
4. Cleaning and disinfection							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested	
					Add a new	row	
5. Slaughtering/culling costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
					Add a new	row	
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Salvage receipts	Animal	17 156	-378.05	-6,485,825.8	yes	X
Wales	Salvage receipts	Animal	3 935	-286.42	-1,127,062.7	yes	x
Northern Ireland	Salvage receipts	Animal	8 300	-200	-1,660,000	yes	x
England	Tuberculin	Dose	6 272 732	0.14	878,182.48	yes	x
Wales	Tuberculin	Dose	1 943 517	0.14	272,092.38	yes	x
Northern Ireland	Tuberculin	Dose	2 485 291	0.14	347,940.74	yes	x
					Add a new	row	
	Total				65 186 300,59		

8.1 Costs of the planned activities for year:

2019

The blocks are repeated multiple times in case of first year submission of multiple program.

To facilitate the handling of your cost data, you are kindly requested to:

- 1. Fill-in the text fields IN ENGLISH
- 2. Limit as much as possible the entries to the pre-loaded options where available.
- 3. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.

1. Testing							
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Tuberculin test	Individual animal sample/test	6 272 732	3.15	19 759 105,8	yes	X
Wales	Tuberculin test	Individual animal sample/test	1 943 517	3.15	6 122 078,55	yes	X
Northern Ireland	Tuberculin test	Individual animal sample/test	2 482 806	3.36	8 342 228,16	yes	X
England	Gamma interferon test	Individual animal sample/test	34 089	13.55	461 905,95	yes	X
Wales	Gamma interferon test	Individual animal sample/test	12 090	13.55	163 819,5	yes	X
Northern Ireland	Gamma interferon test	Individual animal sample/test	20 000	12.39	247 800	yes	X
England	Bacterial culture	Individual animal sample/test	9 148	83.67	765 413,16	yes	X
Wales	Bacterial culture	Individual animal sample/test	2 654	83.67	222 060,18	yes	x
Northern Ireland	Bacterial culture	Individual animal sample/test	3 478	73.96	257 232,88	yes	X

Domestic animals	Individual animal sample/test	20 000	0	0	yes	X
Domestic animals	Individual animal sample/test	31 089	0	0	yes	x
Domestic animals	Individual animal sample/test	12 090	0	0	yes	х
				Add a new	row	
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Badger BCG vaccine	Vaccine dose	1 065	16	17040	yes	X
				Add a new	row	
rs						
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Slaughtering/culling with salvage value	Animal	15 715	1203.23	18,908,759.45	yes	x
Slaughtering/culling with salvage value	Animal	3 605	1901.17	6,853,717.85	yes	х
Slaughtering/culling with salvage value	Animal	8 293	1400	11,610,200	yes	х
				Add a new	row	
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested	
				Add a new	row	
Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
	Domestic animals Specification Badger BCG vaccine Specification Slaughtering/culling with salvage value Slaughtering/culling with salvage value Slaughtering/culling with salvage value	Domestic animals Individual animal sample/test Individual animal sample/test	Domestic animals Individual animal sample/test 31 089 Domestic animals Individual animal sample/test 12 090 Specification Unit Number of units Badger BCG vaccine Vaccine dose 1 065 TS Specification Unit Number of units Slaughtering/culling with salvage value Animal 15 715 Slaughtering/culling with salvage value Animal 3 605 Slaughtering/culling with salvage value Animal 8 293 Specification Unit Number of units Slaughtering/culling with salvage value Animal 8 293	Domestic animals Individual animal sample/test 31 089 0 Domestic animals Individual animal sample/test 12 090 0 Specification Unit Number of units Unitary cost in EUR Badger BCG vaccine Vaccine dose 1 065 16 TS Specification Unit Number of units Unitary cost in EUR Slaughtering/culling with salvage value Animal 15 715 1203.23 Slaughtering/culling with salvage value Animal 3 605 1901.17 Slaughtering/culling with salvage value Animal 8 293 1400 Specification Unit Number of units Unitary cost in EUR Unitary cost in EUR Specification Unit Number of units Unitary cost in EUR Unitary cost in EUR	Domestic animals Individual animal sample/test 31 088 0 0 0 Domestic animals Individual animal sample/test 12 090 0 0 0 Add a new Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Security of the Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Security of the Specification Unit Number of units Unitary cost in EUR Total amount in EUR Slaughtering/culling with salvage value Animal 15 715 1203.23 18,908,759.45 Slaughtering/culling with salvage value Animal 3 605 1901.17 6,853,717.85 Slaughtering/culling with salvage value Animal 8 293 1400 11,610,200 Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Specification Unit Number of units Unitary cost in EUR Total amount in EUR Add a new Specification Unit Number of units Unitary cost in EUR Add a new Specification Unit Number of units Unitary cost in EUR Add a new Specification Unit Number of units Unitary cost in EUR Add a new Specification Unit Number of units Unitary cost in EUR Add a new Specification Unitary Cost in EUR Add a new Specifica	Domestic animals Individual animal sample/test 31 089 0 0 yes Domestic animals Individual animal sample/test 12 090 0 0 yes Add a new row Add a new row Specification Unit Number of units Unitary cost in EUR Total amount in EUR requested requested animal sample/test 12 090 0 0 yes Add a new row FS Specification Unit Number of units Unitary cost in EUR Total amount in EUR requested requested animal 15 715 1203.23 18,908,759.45 yes Slaughtering/culling with salvage value Animal 3 605 1901.17 6,853,717.85 yes Slaughtering/culling with salvage value Animal 8 293 1400 11,610,200 yes Add a new row Add a new row

				Add a new	row .		
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Salvage receipts	Animal	6 272 732	-378.05	-2,371,406,332.6	yes	X
Wales	Salvage receipts	Animal	1 943 517	-286.42	-556,662,139.14	yes	X
Northern Ireland	Salvage receipts	Animal	8 293	-200	-1,658,600	yes	X
England	Tuberculin	Dose	6 272 732	0.14	878,182.48	yes	X
Wales	Tuberculin	Dose	1 943 517	0.14	272,092.38	yes	X
Northern Ireland	Tuberculin	Dose	2 482 806	0.14	347,592.84	yes	х
					Add a new	/ row	
Total					-2 854 497 842,56		

8.1 Costs of the planned activities for year:

The blocks are repeated multiple times in case of first year submission of multiple program.

To facilitate the handling of your cost data, you are kindly requested to:

- 1. Fill-in the text fields IN ENGLISH
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- 3. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.

2020

1. Testing							
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Tuberculin test	Individual animal sample/test	6 272 732	3.15	19 759 105,8	yes	x
Wales	Tuberculin test	Individual animal sample/test	1 943 517	3.17	6 160 948,89	yes	х
Northern Ireland	Tuberculin test	Individual animal sample/test	2 480 323	3.36	8 333 885,28	yes	х
England	Gamma interferon test	Individual animal sample/test	34 089	13.55	461 905,95	yes	х
Wales	Gamma interferon test	Individual animal sample/test	12 090	13.55	163 819,5	yes	х
Northern Ireland	Gamma interferon test	Individual animal sample/test	20 000	12.39	247 800	yes	х
England	Bacterial culture	Individual animal sample/test	9 148	83.67	765 413,16	yes	х
Wales	Bacterial culture	Individual animal sample/test	2 654	83.67	222 060,18	yes	x
Northern Ireland	Bacterial culture	Individual animal sample/test	3 474	73.96	256 937,04	yes	x
Northern Ireland	Domestic animals	Individual animal sample/test	20 000	0	0	yes	x
England	Domestic animals	Individual animal sample/test	34 089	0	0	yes	x
Wales	Domestic animals	Individual animal sample/test	12 090	0	0	yes	X
					Add a new	row	
2. Vaccines						Union funding	
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	requested	
Purchase of vaccine/treatment ofanimal produc	Badger BCG vaccine	Vaccine dose	1 065	16	17040	yes	X

					Add a new	row	
3. Compensation paid to o	wners						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Slaughtering/culling with salvage value	Animal	14 395	1203.23	17,320,495.85	yes	X
Wales	Slaughtering/culling with salvage value	Animal	3 302	1901.17	6,277,663.34	yes	X
Northern Ireland	Slaughtering/culling with salvage value	Animal	8 285	1400	11,599,000	yes	X
		'			Add a new	row	
4. Cleaning and disinfection	on						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested	
			,		Add a new	row	
5. Slaughtering/culling cos	sts						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
					Add a new	row	
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
England	Salvage receitps	Animal	14 395	-378.05	-5,442,029.75	yes	X
Wales	Salvage receipts	Animal	3 302	-286.42	-945,758.84	yes	X
Northern Ireland	Salvage receipts	Animal	8 285	-200	-1,657,000	yes	х

Total					65 038 806,48		
					Add a new	row	
Northern Ireland	Tuberculin	Dose	2 480 323	0.14	347,245.22	yes	x
Wales	Tuberculin	Dose	1 943 517	0.14	272,092.38	yes	X
England	Tuberculin	Dose	6 272 732	0.14	878,182.48	yes	X

8.2 Co-financing rate:

The maximum co-financing rate is in general fixed at 50%. However based on provisions of Article 5.2 and 5.3 of the Common Financial Framework, we request that the co-financing rate for the reimbursement of the eligible costs would be increased:

Oup to 75% for the measures detailed below

Oup to 100% for the measures detailed below

Not applicable

Standard requirements for the submission of programme for eradication, control and monitoring
8.3 Source of national funding
Please specify the source of the national funding:
⊠ public funds
□ food business operators participation
□other
Please give details on the source of the national funding (max 32000 characters)
Government expenditure

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Attachments

IMPORTANT:

- 1) The more files you attach, the longer it takes to upload them .

- 2) This attachment files should have one of the format listed here: jpg, jpeg, tiff, tif, xls, xlsx, doc, docx, ppt, pptx, bmp, pna, pdf.

 3) The total file size of the attached files should not exceed 2 500Kb (+- 2.5 Mb). You will receive a message while attaching when you try to load too much.

 4) IT CAN TAKE SEVERAL MINUTES TO UPLOAD ALL THE ATTACHED FILES. Don't interrupt the uploading by closing the pdf and wait until you have received a
- 5) Only use letters from a-z and numbers from 1-10 in the attachment names, otherwise the submission of the data will not work.

List of all attachments

Attachment name	File will be saved as (only a-z and 0-9 and) :	File size
3749_3308.pdf	3749_3308.pdf	272 kb
3749_3309.pdf	3749_3309.pdf	258 kb
3749_3310.pdf	3749_3310.pdf	101 kb
3749_3311.pdf	3749_3311.pdf	119 kb
3749_3312.pdf	3749_3312.pdf	121 kb
3749_3313.pdf	3749_3313.pdf	206 kb
3749_3314.pdf	3749_3314.pdf	162 kb

3749_3315.pdf	3749_3315.pdf	527 kb
3749_3316.pdf	3749_3316.pdf	290 kb
3749_3317.pdf	3749_3317.pdf	139 kb
	Total size of attachments :	2194 kb