

**Final Report of the Rural Development  
Sub-committee**

**Inquiry into bovine Tuberculosis**

**January 2008**

## **Introduction**

This is the first inquiry report of the Rural Development Sub-committee. It was established as a scrutiny Sub-committee of the National Assembly's Sustainability Committee in July 2007.

The Sub-committee identified bovine TB as one of the most serious challenges facing Welsh agriculture and the Welsh countryside today. Its impact on wildlife, cattle and the industry is growing rapidly and to date various policies that have been used to bring the disease under control have all failed to stop its spread.

In writing this report the Committee gathered oral and written evidence from a number of different organisations, individuals and bodies and held a number of witness sessions. The Committee also visited Northern Ireland. The Committee would like to place on record its appreciation to all those who took the time to give evidence and provide the Committee with the information that it needed to come to its conclusions and recommendations.

It has become clear that the Assembly Government will need to make substantial investments in the animal disease control and biosecurity infrastructure in Wales. At present, we are simply not convinced that we have the tools available at our disposal to either control or eliminate the disease.

At the same time, it is now clear that there is a real link between bovine TB in cattle and the disease in wildlife. Whilst it may be possible to control the disease by implementing biosecurity measures alone, it is not possible to eradicate the disease in this way. The Committee is now convinced that the Government should adopt an holistic approach which will defeat the disease in both the wildlife population and within the cattle population.

The Committee would also wish to thank the staff, Virginia Hawkins, Joanne Clinton and Carys Jones for their hard work and support in the production of this report.

**Alun Davies AM**  
**Chair, Rural Development Sub-committee**

## **1. Background**

1.1 Bovine Tuberculosis (bTB) has become a growing problem in Wales. Since 1998, when 1046 cattle were slaughtered and 312 herds were restricted in their movements under TB control measures, there has been a steady rise in numbers to current day levels of 5034 cattle slaughtered and 1945 herds under restriction in the first 9 months of 2007<sup>1</sup>. The cost to the Welsh Assembly Government of compensation payments to farmers has risen from £1 million in 1999/00 to over £11 million in 2006/07.

1.2. In 2004, the Assembly's Environment, Planning and Countryside (EPC) Committee carried out a policy review into bTB in Wales and made a series of recommendations to the Welsh Assembly Government<sup>2</sup> (*EPC Committee, August 2004*), all of which were accepted. Since the publication of the Committee's report, the incidence of bTB Wales has increased each year.

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<sup>1</sup> Defra *TB statistics* <http://www.defra.gov.uk/animalh/tb/stats/latest.htm>

<sup>2</sup> Environment Planning and Countryside Committee *Inquiry Into Bovine Tuberculosis* August 2004

1.3. In 1997, the Independent Scientific Group on Cattle TB (ISG) was set up to design and oversee a randomised badger culling trial (RBCT) to assess the effect of culling badgers on the spread of bTB as well as carrying our research into the diagnosis, pathogenesis, dynamics and control of TB in cattle and badgers. The group published their final report in June 2007<sup>3</sup>.

1.4. At their first meeting in July 2007, the newly established Rural Development Sub-committee decided that their first scrutiny inquiry should assess the progress of the Welsh Assembly Government in implementing the EPC Committee's recommendations and their response to the ISG report.

### **The EPC report and recommendations**

1.5 Terms of Reference for the Enquiry were to:

Investigate how the Welsh Assembly Government can contribute to the containment of *M. bovis* through its existing powers;

Review the long-term management and reduction of *M. bovis* through animal health and welfare best practice and control processes, acknowledging available scientific evidence

1.6 The Committee took evidence from scientists, farmers, veterinary officers, wildlife groups and officials from the Welsh Assembly Government between February and May 2004. A number of recommendations were made – these are included in Annex A.

1.7 The Committee concluded that options for the control of bovine TB must consider a number of complex issues, including the disease itself, its spread, the role of wildlife and the development of testing and control tools. Views on methods for control of the disease often conflict, such as those of farming interests, wildlife groups and the general public. Some of the issues associated with bovine TB are summarised in the report as follows:

- The spread of bovine TB in and between cattle and wildlife is not clearly understood. Much research has been completed and continues to be undertaken. Much of this is long-term in nature with no practical solution apparent in the short-term.
- Current tests for bovine TB in cattle are not completely reliable. Tests for TB in badgers and other wildlife are less reliable. The skin test is the only internationally recognised test. The gamma interferon test produces more false positives.
- Badgers are widely believed to play a role in the transmission of bovine TB, but this has not been definitively proven and the extent of the badger's role is unknown. This leads many farmers to support some form of badger control, particularly in areas where TB is a continuing problem. Badger conservation groups oppose this.
- The role and extent that cattle-to-cattle transmission plays in the maintenance and spread of TB is unknown. More rigorous biosecurity and cattle husbandry measures may reduce the spread of TB. An independent review of cattle husbandry measures was set up by Defra, which proposed several precautionary husbandry practices that may reduce the risk of cattle contracting TB.
- Recommendations included preventing wildlife access to farm buildings and food stores, fencing off badger setts to prevent cattle gaining access to them, limiting stocking densities in buildings and other general biosecurity measures. Farmers may be unwilling to implement increased biosecurity measures without financial assistance, or if they negatively impact on business.

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<sup>3</sup> *Bovine TB: the Scientific Evidence*, Final Report of the Independent Scientific Group on Cattle TB, June 2007  
[http://www.defra.gov.uk/animalh/tb/isg/pdf/final\\_report.pdf](http://www.defra.gov.uk/animalh/tb/isg/pdf/final_report.pdf)

- A cattle and/or badger vaccine has been in development for many years. A vaccine suitable for widespread use remains at least 10 years away.

## ISG final report

1.8 The Independent Scientific Group (ISG) on Cattle TB started its work in 1998 to implement the recommendations of the Krebs Report on bovine TB. The terms of reference for the group were:

To advise Ministers on implementation of the Krebs<sup>4</sup> report on bovine TB and badgers by:

- Overseeing the design and analysis of the randomised trial to test the effectiveness of badger culling as a means of controlling bovine TB;
- Regularly monitoring the progress of, and output from, the trial and assessing any important differences in results between the treatments;
- Monitoring data on the *Mycobacterium bovis* situation in areas and species outside the trial
- Reporting to the Ministers on progress; and
- Advising, as requested, on related issues

1.9 The main issues identified in the report were:

- Increased control measures directly targeting cattle are believed to have the potential to reverse the increase in incidence of cattle TB and stop its geographical spread
- Whilst badgers contribute significantly to the transmission of the disease, cattle-to-cattle transmission is also very important
- Improved surveillance, testing and control measures would reduce transmission
- Although culling reduced badger density, its effect on the rate of infectious contact with cattle is difficult to predict since it also increased the prevalence and spatial extent of infection within the badger population
- The trial provided evidence of links between *M. bovis* in cattle and badgers
- The trial has shown that badger culling can prompt both beneficial and detrimental effects for the control of cattle TB
- Reactive culling of badgers in the ways adopted by the trial does not offer a beneficial effect large enough to make it useful as a practical policy option
- Reactive culling appeared to have an overall detrimental effect while proactive culling reduced the incidence of cattle TB in the areas culled, but the benefits were offset by detrimental effects on neighbouring land
- Careful consideration must be given to whether the overall benefits of badger culling justify the costs
- There are limitations to the tuberculin skin test
- Movement of cattle can be a cause of herd breakdowns in areas that do not appear to sustain the *M. bovis* infection
- Improving the gamma interferon test has potential for developing better diagnosis
- Shorter gaps between initial and follow-up testing could be introduced
- The results from the reactive treatment area demonstrates a totally adverse economic outcome

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<sup>4</sup> *Bovine tuberculosis in cattle and badgers*: report to the Rt Hon Dr Jack Cunningham MP by the Independent Scientific Review Group (Chairman Professor John R. Krebs) 1997, MAFF  
<http://www.defra.gov.uk/animalh/tb/publications/krebs.htm>

- There is no net economic gain in proactive treatment areas and therefore in economic terms the report concludes that the activity would not be worthwhile
- Overall, the ISG believes that badger culling cannot meaningfully contribute to the future control of cattle TB in Britain and that increased control measures targeting cattle would be more effective.

## 2. Key issues identified from the evidence

2.1 During the course of its inquiry, the Committee took evidence from stakeholders both orally and in writing as well as the minister for Rural Affairs and government officials and stakeholders in Northern Ireland. The Committee would have liked to have received evidence from the Republic of Ireland, but several requests for information were declined. A full list of those providing evidence to the Committee is at Annex B.

### Reactions to the Final Report of the Independent Scientific Group on Cattle TB

#### *General*

**2.2 The work of the ISG provided important scientific evidence of the link between bTB in cattle and badgers;** an ecological perspective on disease control is therefore required. The ISG's findings highlight the effect of culling on badger ecology and behaviour as well as the effect of their behaviour on TB epidemiology.

**2.3 The findings of the ISG should be considered alongside other evidence.** Government should consider all the evidence and experiences available in developing control strategies. Examples cited included the Four Areas Trial in Ireland, the Thornbury trial, New Zealand, Australia and the USA.

**2.4 Focusing on cattle control measures alone will not provide a solution.** The NFU believed that this approach would be inconsistent with evidence that shows a close geographical relationship between specific types of bTB in badgers and cattle. Some witnesses believed that changes to cattle testing regimes should be complemented by steps to reduce reserve of TB in wildlife. Concerns were expressed by the Badger Trust that badger culling should not be offered as a quid pro quo for implementing cattle based measures.

2.5 Professor Bourne, highlighted the fact that the disease is cyclic – badgers contribute to the disease in cattle; cattle contribute to the disease in badgers; cattle contribute to the disease in cattle. **If an approach to eliminating the disease were to be taken then both badgers and cattle would need to be considered.** The only way of eradicating the disease would be by way of a very forceful impact on the disease in cattle and an equally forceful impact on wildlife, which would lead to the virtual elimination of badgers.

2.6 The work of the ISG is evidence that badger culling is not effective except over very large areas and at great cost. **Some of the witnesses believed that this meant that culling strategies were not sustainable as a disease control option in the long term.** The Thornbury example was given by the RSPCA as being an example of an area where, despite its large geographical coverage, required the re-gassing of setts on 515 occasions during the seven years of the trial.

**2.7 Whilst many witnesses defended the scientific robustness of the trial, others criticised it.** The RSPCA and Badger Trust cited the peer review process, independent auditing and scrutiny, and publication of the ISG's findings throughout the trial as evidence that the findings of the ISG were scientifically robust. The Committee heard from Professor Bourne that scientific rigour was an integral part of the work. A significant amount of time was spent designing the trial to ensure that the trial provided an answer to the question of whether culling badgers can contribute to the control of cattle TB as well as providing epidemiological evidence relating to the ecology and TB in badgers. The highest quality scientific journals were chosen for publication, Nature, PNAS, the Journal of Ecology and the Journal of Zoology, with international scientific referees.

**2.8 Many believed that the conclusions of the ISG do not match with their findings.** In their evidence, the farming unions and the CLA believed that the

conclusions of the ISG reflected the flaws in the design of the RBCT rather than being evidence that culling badgers would not provide a solution to the problem.

*Design of the Randomised Badger Culling Trials (RBCT)*

**2.9 The culling strategy adopted by the ISG does not provide a solution to the problem of TB infection within wildlife.** The RSPCA made reference to the cattle management options discussed in Chapter 10 of the ISG's report which they believed provides robust arguments against culling. The farming unions and the CLA criticised the efficiency and methodology of the RBCT.

2.10 NFU Cymru found that the numbers of badgers culled were low (ranging from 20% to 70%) and the number of trapping days was low (average of 8 days per year), although Professor Bourne explained that the ISG achieved 73% badger removal with 80% culling efficiency. **Criticisms were also made of the culling methodology**, with suggestions made for alternative means to include the gassing of badger setts, snaring and shooting (as used in Ireland, which the NFU stated have led to a 42% reduction in TB incidence). It was suggested that these factors caused the levels of perturbation experienced within the trial.

2.11 Representatives of the agriculture industry argued that they believed the work of the ISG was proof that by tackling all vectors with equal ferocity, significant reductions in TB incidence can be achieved. The RSPCA, however, stated that even if there was 100% trapping efficacy, there would still be perturbation.

2.12 Some witnesses criticised the way that the RBCT was designed, but thought that it provided important information about the design of any future culling strategies. It was suggested that **the effect of the trial was more significant than outlined by the ISG** and that sustained culling over a longer period of time would have produced different results. The ISG were criticised for undertaking an analysis of possible adaptations of the culling methods which was not comprehensive enough. However, the RSPCA stated that **the method adopted took account of animal welfare considerations.**

*The perturbation effect*

**2.13 Culling, as practiced in the RBCT, caused perturbation and increased incidence of cattle TB.** The farming unions and the CLA cited evidence within the ISG report which demonstrated that geographical barriers could be expected to influence the impact of badger culling on cattle TB. It was suggested that **the Welsh Assembly Government should build on the knowledge and evidence provided by the ISG** and investigate the possibility of developing a culling trial within an area with hard physical boundaries; low boundary permeability; it should cover a large geographical area; regular, thorough culling should be undertaken to ensure efficiency. It was suggested that where natural barriers did not exist, boundaries such as railway lines could be considered as they deter an animal from going a certain way.

2.14 Professor Bourne believed that a very large area of between 300 and 400 sq km would be required to make culling effective and the logistics and resource requirements would be vast. The ISG's modelling suggests that, for badger culling to have an impact on the disease in cattle, a large proportion of badgers would need to be eliminated – about 90% of the population, which would near elimination and difficult to justify to many people.

**2.15 The RSCPA questioned the legality and practicality of such an operation whilst the Badger Trust believed that the agricultural sector had not made the economic case for such a strategy nor had solutions to the problems faced by the ISG been offered.** These groups also expressed their concerns that such a

strategy would mean the elimination of the badger population but that cattle to cattle transmission would remain.

**2.16 Ireland's experiences should be drawn on.** The RSPCA made reference to the fact that, despite the way the Four Areas Trial in Ireland was designed; (in a way that would minimise the repopulation of the areas by badgers) there was still evidence of inward migration after the reduction of the resident population. However, the farming interests cited this as an example of good practice which the Welsh Assembly Government should draw upon for its future strategy, given the reduction levels that had been achieved in Ireland.

**2.17 Professor Bourne highlighted the differences between Ireland and the UK; badger elimination over 30% of the land mass in Ireland is Government policy.** This has made an impact but their processes have been very different. Even in Ireland, they found it difficult to design a trial in areas with physical boundaries. The ISG focused on hot spots, but also tried to match with boundaries that provided physical barriers where possible, such as motorways, rivers and coastline. Professor Bourne believed that **finding geographical boundaries that cannot be penetrated by badgers is very difficult**, notwithstanding the logistical problems of removing badgers to the right level to ensure the situation is not worsened.

#### *Cost-benefit analysis*

**2.18 The cost-benefit analysis undertaken by the ISG was insufficient.** Critics found the cost-benefit analysis to be valid only for the method of culling adopted by the RBCT; that it did not cover a long enough time period; that it was too narrow; that it didn't consider issues such as social and environmental costs if farming became unviable in some parts of the country.

**2.19 No cost-benefit analysis was made of the proposed cattle-based control measures.** The analysis was believed to be too restricted and should have included measures to reduce the transmission from badger to cattle and back again, given that a lot of contact happens within farm buildings.

#### *Responsibility and ownership*

**2.20 Criticisms were made of the ISG's comments that the farming industry has not taken ownership the TB disease problems.** The NFU referred to an industry-wide stakeholder meeting in August 2006 which demonstrated the industry's willingness to work in partnership with Government to tackle the disease. Biosecurity and testing are very important issues in the farming industry, particularly in areas with frequent testing.

#### *Cattle and farm control measures*

**2.21 Farm control measures should be explored further.** Several witnesses believed that further work should be undertaken to look at ways of keeping the two species apart, but that there would be significant costs associated with this. Cattle based measures would help with other animal health issues and with carefully targeted funding this could improve the economic viability of farming. The Badger Trust suggested that a case control study should be developed by the Welsh Assembly Government to look at ways of preventing badgers from accessing farm buildings, cattle sheds etc.

**2.22 Cattle control measures would need to be cost-effective and must enable farming to continue.** Concerns were expressed about the greater costs of increasing

the use of g-IFN<sup>5</sup>; this would have implications for Government budgets and the viability of farms within hotspot areas. Zoning the country according to clean and susceptible areas would create a two-tier market which would create difficulties for farmers within the susceptible areas in selling their livestock by having an impact on retailers' buying patterns.

**2.23 Increasing awareness of biosecurity with farmers is essential.** The WAG toolkit is an example of excellent practice and makes farmers take ownership of the matter. The Badger Trust and RSPCA emphasised the importance of biosecurity, given the outcome of the ISG's culling strategy. The ISG suggested an approach to biosecurity which approach identifies high-risk and low-risk farms and controls trading between those farms.

**2.24 Reactors are infectious potential disease transmitters and therefore should be removed as quickly as possible.** Professor Bourne believed this was part of biosecurity and that cattle biosecurity should include everything from improved diagnosis, cattle movement, quarantine, quick removal of infected animals from premises, discipline regarding where animals are purchased from and the prevention of contact with neighbouring farms.

#### *Testing*

**2.25 The ISG's work supported the view that increased testing and cattle control measures would eventually put the disease into reverse, but this would take time.** Changes to testing regimes and frequency should be considered. The cost effectiveness of annual testing must be taken into account. There should be consideration of ways of undertaking several tests at any one time, to increase efficiency. NFU Cymru stated that widespread use of the g-IFN test has shown that about 30% extra cattle would be taken out of the national herd, therefore there would be increased compensation costs. In general, **there is support for annual testing but recognition that this will create higher costs.**

2.26 The CLA referred to the need **for any annual testing, if introduced, to minimise herd restrictions so that trade can resume quickly.** Conwy CBC emphasised the need to safeguard areas of low incidence. The Badger Trust believed that a more stringent testing regime should be developed if farmers are to continue receiving compensation from the public purse.

**2.27 The work of the ISG highlighted the problems of diagnosis using the tuberculin test** and recommended that it should be replaced entirely in the future with the g-IFN test. There are currently questions about specificity and sensitivity. Information on future use of g-IFN should be obtained by using it in different situations to gain a better understanding of how it can help to control the infection within those herds. Professor Bourne stated that Polymerase Chain Reaction is as yet unproven as a tool to be used on the field. It has been used in an attempt to identify microbacteria in the environment but it cannot distinguish between dead and live microbacteria.

#### **Implementation of the Environment, Planning and Countryside Committee's recommendations**

A progress report from the Welsh Assembly Government is provided at Annex C.

2.28 The Minister for Rural Affairs told the Committee that she intended to spend £27 million on a TB eradication programme over the years 2008 – 2011. Although unable to provide any detailed plans, the Minister did refer to the need to look at cattle testing,

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<sup>5</sup> Gamma Interferon (g-IFN) has been developed as a possible alternative to the skin test. The test is carried out in a laboratory in blood taken from cattle in the field and is based on detecting an immune response to the *M. Bovis* infection

biosecurity on farm and the interaction between cattle and wildlife. The strategy will be developed in early 2008, with expenditure to commence in April 2008.

2.29 The Minister stated that the work will be informed by existing evidence, including the report of the ISG and the recommendations made by Sir David King to the UK Government<sup>6</sup>.

2.30 The TB Action Group will be discontinued, with the Animal Health and Welfare Strategy Group to be used as a forum for discussing issues relating to bovine TB in the future.

#### *General*

2.31 General comments made on the Welsh Assembly Government's progress included

- Any future approach should continue to be based on scientific knowledge and should involve a long term sustainable strategy.
- Improved testing is necessary; **some witnesses called for annual testing across Wales to protect non-infected areas.**
- Many witnesses believed that **a rigorous approach to animal husbandry would improve biosecurity** and decrease the risk of bTB infection.
- Additional work could be undertaken in terms of researching the contribution that nutrition can make to controlling bTB.

#### **Issues raised on the individual recommendations in the report**

*ECP Committee Recommendation 1: That the Welsh Assembly Government takes immediate action to tackle Bovine TB in Wales, as outline in this report. Wales' approach to tackling TB should be holistic and pragmatic involving all aspects associated with the spread of the disease. Measures should be developed in partnership with all stakeholder groups and based on current scientific knowledge.*

2.32 **In general, it is not believed that an holistic approach to tackling TB has been taken.** The farming interests in particular felt that not enough had been done to deal with measures relating to wildlife, despite the acknowledgement in the ISG's work that badgers are a significant cause of the disease and that there is now sufficient scientific evidence to make decisions about wildlife. NFU Cymru observed that support for the Biosecurity Intensive Treatment Area (ITA) had been shown by industry on the basis that an holistic approach would be taken. However, strong concerns were expressed by others that a wildlife ITA should not be developed as a quid pro quo for biosecurity.

2.33 The FUW noted that they had consulted with their members to see whether a change in Parish Testing Intervals should be implemented. Their members felt that these shouldn't be changed because they are currently based on valid risk assessment.

2.34 **Pre movement testing has been welcomed, although concerns have been raised over the cost** of the initiative. The Badger Trust expressed concern over whether cattle sales were actually dependent on a valid pre-movement testing certificate.

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<sup>6</sup> Bovine Tuberculosis in Cattle and Badgers, *A Report by the Chief Scientific Adviser Sir David King*, July 2007 <http://www.dius.gov.uk/publications/Expert%20advice%20on%20badgers%20and%20cattle%20TB.pdf>

*EPC Committee Recommendation 2: That the Welsh Assembly Government establishes an 'Intensive Treatment Area' within a hotspot area in Wales that has experienced prolonged problems with TB, incorporating the points set out in this report. This should be funded by the Welsh Assembly Government.*

**2.35 Intensive Treatment Areas, in general, have been a welcome development as a means of providing valuable information that was previously lacking.** It was felt by some witnesses that there was sufficient evidence to warrant an ITA to look at wildlife issues. However, CCW expressed the view that the work of the ISG was proof that a wildlife ITA using the approach adopted by the RBCT, should not be considered.

2.36 NFU Cymru commented that there had been selective application of ITAs and that no action had been proposed for diseased wildlife, nor had there been a wildlife ITA. They believed that there was enough evidence to support the creation of an ITA with hard physical boundaries to prevent perturbation in which regular, thorough culling could take place.

**2.37 The biosecurity ITA is generally viewed as a positive development.**

Witnesses felt that the approach to biosecurity in this area should be rolled out across Wales. Important lessons had been learned which could be applied to other transmissible animal diseases. Concern was expressed that the biosecurity ITA was not applied in a way that was sufficiently scientific that it could be evaluated in a way that was meaningful and robust.

**2.38 Some witnesses believed biosecurity measures improving herd management and reducing contact between cattle and badgers should be adopted in high risk areas.** The Badger Trust suggested that a cross compliance mechanism could be developed with farmers entitled to compensation only if they have adopted a minimum standard of disinfection, but that the benefits of such measures would need to be assessed.

2.39 The Badgers' Trust recommended that a case controlled study looking at the benefits arising from preventing badgers from accessing farm buildings should be developed.

*EPC Committee Recommendation 3: That the Welsh Assembly Government incrementally rolls-out intensive treatment to other areas of Wales if, following evaluation, it proves useful in controlling TB. Sharing of costs of funding between the farming industry and the Welsh Assembly Government should be considered.*

**2.40 Measures to deal with cattle and wildlife infectivity should be rolled out swiftly once proven.** Comments were made that discussions continue on the sharing of cost and responsibility between industry and Government.

*EPC Committee Recommendation 4: That the Welsh Assembly Government establishes a Wales TB Action Group to deliver short-term measures to tackle TB in cattle and to investigate longer-term measures, as outline in this report. Membership of the Action Group should be small and made up of those able to implement decisions, but representative of stakeholders. The Wales TB Action Group should be accountable to the Minister, but with a specific remit for action. Regular reports should be made to the Minister and publicised to all stakeholders.*

**2.41 The creation of the TB Action Group has been viewed as a positive step,** providing a forum for discussion and an opportunity to bring stakeholders together. All witnesses wished to see this group continue. However, during the Rural Development Sub-Committee meeting on 8 November, the Minister for Rural Affairs stated that this group would be discontinued, with the Animal Health and Welfare Strategy Group used as the appropriate forum for such discussions in the future.

## Recommendation 5

2.42 The CLA suggested that a group should be created to direct and monitor progress on vaccine development. Many of the challenges remain, including the efficacy of the vaccine, the length of immunity, effects on non-target species and the lengthy licensing and registration process.

### Evidence from Northern Ireland

Several witnesses indicated that the TB strategy in Northern Ireland was showing positive results in reducing the incidence of TB and two members of the Committee visited Belfast to gather further evidence.

2.43 **The main objective of the Northern Ireland TB programme is the control of TB in Northern Ireland, not its eradication.** Witnesses from the Ulster Farmers Union argued that the objective should be eradication and that there was not an 'acceptable' level of bTB that could be tolerated.

2.44 The Northern Ireland TB Control Programme has resulted in a decline in numbers of infected cattle over the past 5 years, however, **figures have only reduced to pre Foot and Mouth outbreak levels of 2002. It was generally accepted that there is a 'hard to tackle' reservoir of the disease.**

2.45 The main tools used in the Northern Ireland TB programme are:

- **annual herd testing of all animals (enforced by imposing strict restrictions on any herd not tested within the 12 month period);**
- **reactor removal within 15 days (with 100% compensation);<sup>7</sup>**
- **Facilities for comprehensive epidemiological testing and tracking of the disease;**
- **A variety of methods to restrict the spread of the disease once identified including further testing of surrounding herds, advice on risk factors and retesting after 4-6 months;**
- **A computerised tracking system for all cattle that uses real time data and is accessible by farmers, vets and government officials.**

Around 250 vets are used in Northern Ireland to carry out the annual testing on a total herd of around 1.7 million cattle<sup>8</sup>. In Wales, 819 practicing vets are registered as living in Wales (although some may work outside Wales). The Welsh herd is around 1.2 million cattle<sup>9</sup>. The total number of holdings in Wales in 2006 was 37,448<sup>10</sup> whilst in Northern Ireland, there were 26,739<sup>11</sup>.

Both the Ulster Farmers Union and the Ulster Wildlife Trust agreed that the measures in the TB Control Programme were contributing to the reduction of the disease.

2.45 **The Northern Ireland TB Programme does not address the role of wildlife in the spread of TB.** Research is currently being undertaken into the badger population

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<sup>7</sup> Royal College of Veterinary Surgeons

<sup>8</sup> Welsh Assembly Government and National Statistics, *Welsh Agricultural Statistics 2006*  
<http://new.wales.gov.uk/topics/statistics/publications/was2006/?lang=en>

<sup>9</sup> Ibid.

<sup>10</sup> Welsh Assembly Government and National Statistics, *Farming Facts and Figures Wales 2007*  
<http://new.wales.gov.uk/docrepos/40382/40382313/statistics/agriculture/1270792/farming-facts07-e2.pdf?lang=en>

<sup>11</sup> Department of Agriculture and Rural Development Northern Ireland, *Farm and Farm Labour Statistics*  
<http://www.dardni.gov.uk/index/dard-statistics/agricultural-statistics.htm>

in Northern Ireland through engagement with a Badger Stakeholder Group, a population survey and a review of published scientific evidence. The existing approach to TB control will be reviewed in the light of the research.

2.46. The Ulster Farmers Union considered that TB could not be eradicated in Northern Ireland unless measures were taken to prevent its spread by wildlife. They advocated a culling regime similar to that adopted in the Republic of Ireland until a suitable vaccine could be developed.

2.47 The Ulster Wildlife Trust considered that the measures currently being taken under the TB Control Programme were adequate and that there is insufficient scientific evidence of the causal link between wildlife and cattle infection to merit culling.

### **3. Conclusions**

3.1 After taking evidence in Northern Ireland, we believe that the eradication of TB in Wales rather than the control of the disease should be the objective of any TB Strategy produced by the Welsh Assembly Government. We acknowledge, however, that this is a long term objective which is unlikely to be achieved during the lifetime of the current administration.

3.2 The issue of the control of TB in cattle is a very emotive subject which resulted in polarised opinions from many organisations. The responses to both the ISG report and the progress on the implementation of the EPC Committee's recommendations, however, unanimously reflected that view that the current TB situation in Wales is not sustainable.

3.3 The ISG's work provided evidence of the link between badgers and cattle but also emphasised that it is essential that the transmission route between cattle is not ignored and made a case for improving cattle controls. Our visit to Northern Ireland also demonstrated that this was an important element of the control of the disease. Several witnesses agreed with this, suggesting improvements in animal husbandry and biosecurity, increased testing and stricter movement controls were key.

3.4 On the whole, the farming unions did not support the conclusion that the widespread culling of badgers may not achieve the desired results of controlling the spread and/or eradicating TB. They considered that a causal link exists between TB infected badgers and the spread of TB in cattle and that, if culling were undertaken across a wide enough area, the perturbation effect observed in the ISG study would not be a significant factor.

3.5 The animal welfare and wildlife organisations, however, did not believe that enough is known about the causal link between the spread of TB in cattle and the presence of TB in the badger population. They, on the whole, support the findings of the ISG and are against the culling of wildlife as a measure to control and/or eradicate TB.

3.6 We believe, having reviewed all the available evidence, that there is a proven link between the transmission of TB between cattle and badgers. We also believe that TB cannot be eradicated without addressing the reservoir of infection in wildlife.

3.7 Against this background, we feel faced with a stark choice – to recommend the culling of wildlife (especially badgers) as the main tool in the control and/or eradication of TB or to recommend that culling wildlife is not an effective tool and to recommend other measures.

3.8 We do not feel that there is currently sufficient evidence to make conclusive recommendations on either course of action as a single answer to the eradication of TB.

3.9 We agree with many of the witnesses who advocated an holistic approach to the control and eradication of TB.

3.10 Several witnesses pointed to a lack of scientific evidence about the disease, how it is spread and the ecology of the wildlife infected with it. There were calls for further research into many of the aspects of the disease.

3.11 We received evidence from many witnesses about additional measures that can be taken to contribute towards the control of TB. We also heard evidence that the

recommendation from the EPC Committee's report that Intensive Treatment Areas (ITAs) be established had only been partially implemented.

3.12 Witnesses commended the work of the WAG in implementing the biosecurity ITA and underlined the importance of good animal husbandry in preventing the spread of animal disease. Much of the evidence supported the view that greater knowledge transfer between the farming industry and veterinary/animal health professionals should be supported.

3.13 There was universal support amongst all witnesses for the introduction of a proven, safe TB vaccine for wildlife. Whilst there are trials of vaccines being undertaken in England and The Republic of Ireland, the majority of witnesses acknowledged that the production of a useable vaccine was several years away.

3.14 We were impressed by the contribution of the APHIS system of cattle monitoring in Northern Ireland to the TB Control Programme. The ability of farmers, vets and officials to access the information on individual animals in real time appears to have contributed greatly to identifying the type and location of the disease quickly and putting in measures to prevent its spread.

3.15 We heard evidence about the testing regimes being used in Wales and in Northern Ireland. The evidence we heard from Northern Ireland led us to the opinion that a regime of annual testing, funded by the government could significantly contribute to the control of TB. We also believe that, as in Northern Ireland, there have to be stringent controls to ensure that the annual testing regime is adhered to throughout the industry.

3.16 We heard evidence of how improvements could be made to the identification of reactors, e.g. the targeted use of g-IFN testing, the use of a more up to date tuberculin, and the use of more up to date testing methods (the current ones have been in use since the 1930s).

3.17 We also received evidence that the current testing regimes still leave a significant reservoir of undetected disease in herds (some estimates were as high as 30%).

3.18 We consider that the Welsh Assembly Government should be open about and accountable for any actions it takes as part of its strategy to control and eradicate TB.

3.19 We consider that, to implement the recommendations we make in this report, there needs to be a robust infrastructure established by the Welsh Assembly Government to support the tools for TB control and eradication.

3.20 There was some debate amongst those giving us evidence about how the costs of control measures should be met. The farming industry, on the whole considered that it already bears many of the costs associated with TB and that any further costs such as that of annual or pre movement testing or increased g-IFN tests should be borne by the Welsh Assembly Government.

3.21 Concerns were also expressed about the increasing cost of compensation, and the burden this places on the public purse. Questions were raised over whether this was a sustainable situation. We consider that, with the dual aims of control and, eventually eradication of TB, increased spending in the short term on increased research and control measures will be offset by a longer term reduction in compensation payments as the instances of TB reduce.

3.22 We believe that there should be an informed debate on the issue of funding and costs and benefits of additional measures as they are identified.

**We believe that all the stakeholders involved have to take ownership of the problem and responsibility for the measures that they are able to manage.**

**In summary, we consider that the control and eventual eradication of bTB in Wales cannot be achieved by one method alone but by a suite of measures used in conjunction with each other. We believe that only by a combination of increased on farm biosecurity, the understanding and control of TB in the wildlife population and the speedy and accurate identification and management of reactors and at risk herds will TB in Wales be controlled and, eventually eradicated.**

## **Recommendations**

### *General policy objectives*

**Recommendation 1: The Committee endorses the Welsh Assembly Government's aspiration to eradicate TB in Wales and recommends that the forthcoming TB Strategy, whilst having eradication as its long term aim, should include short term measures to control the spread of TB.**

### *Biosecurity*

**Recommendation 2: The Committee recommends that the Welsh Assembly Government introduces a system of cattle monitoring based upon the APHIS system in Northern Ireland to the TB Control Programme. We also recommend that the Assembly Government investigates options for funding farmers to access the system.**

**Recommendation 3: The Committee recommends that the Welsh Assembly Government works closely with the UK government to identify the areas in which research is lacking and introduces further pilot ITAs in Wales to implement any new research findings.**

**Recommendation 4: The Committee recommends that the Welsh Assembly Government should introduce the annual testing of animals in Wales. At the same time, it should also put in place measures to ensure that the testing regime is adhered to throughout the industry.**

**Recommendation 5: The Committee recommends that the Welsh Assembly Government works to encourage further work on testing techniques at a GB level and requests that Wales be used as a test area for any new techniques that are developed.**

### *Wildlife controls*

**Recommendation 6: The Committee recommends that the Welsh Assembly Government establishes a series of pilot areas in Wales, continuing with the approach adopted under the ITAs and encouraging the application of existing research and practice in those areas we identify below.**

**Recommendation 7:** The Committee also recommends that an ITA be created in Wales to provide further evidence on the effects on the spread of TB of culling wildlife in an area with hard boundaries.

**Recommendation 8:** The Committee recommends that the Welsh Assembly Government increases the number of Intensive Treatment Areas to establish areas for wildlife and vaccination of badgers (when the current scientific trials are concluded) as well as continuing to develop the biosecurity ITA as further research is undertaken.

*Animal disease infrastructure*

**Recommendation 9:** The Committee recommends that the Welsh Assembly Government produces a 'route map' as part of its strategy which identifies key dates and targets for the control and eradication of TB.

**Recommendation 10:** The Committee also recommends that the Welsh Assembly Government publishes an annual statement of performance against those targets and an assessment of progress towards eradication.

**Recommendation 11:** The Committee further recommends the following:

- Investment to ensure that there are sufficient large animal veterinary practices to support new testing regimes;
- The establishment of laboratory facilities for Gamma Interferon testing in Wales;
- The establishment of research facilities for animal health and disease control in Wales;
- Investment to ensure that the removal of reactor animals is achieved within tightly defined target dates; and
- Investment in the appropriate hardware and software to enable comprehensive data to be input and accessed at all levels of the industry.

**Recommendation 12:** The Committee therefore recommends that the Welsh Assembly Government carries out a detailed cost-benefit analysis of any additional measures it considers introducing for the control of TB. Discussion on the allocation of costs should be held with relevant stakeholders before those costs are allocated.

*Powers*

**Recommendation 13:** The Committee recommends that the Assembly Government reviews the current extent of its powers to ensure that it has the powers necessary to implement the holistic approach outlined above. The Committee recommends that the Assembly Government seeks any further powers that it requires as a matter of urgency.

### Recommendations of the Environment, Planning and Countryside Committee

**Recommendation 1: That the Welsh Assembly Government takes immediate action to tackle Bovine TB in Wales, as outlined in para. 3.8 of this report. Wales' approach to tackling TB should be holistic and pragmatic involving all aspects associated with the spread of the disease. Measures should be developed in partnership with all stakeholder groups and based on current scientific knowledge.**

“3.8 The Welsh Assembly Government could take immediate action in the following areas:

- Implementation of pre-movement testing across Wales, with cattle sale dependent on a valid pre-movement testing certificate.
- Increase the frequency of cattle testing in clean parishes from every four years to every two years.
- Introduce the use of the gamma interferon test for all herd breakdowns to ensure diseased cattle are identified and removed as soon as possible.
- Ensure that TB99 forms are completed for all herd breakdowns.
- Ensure that the recommendations of the Independent Husbandry Panel are implemented on farms.
- Collect and test wildlife killed in Road Traffic Accidents (RTAs) outside hotspot areas.
- Introduce a dedicated TB helpline or TB information packs to ensure help is available for farmers to deal with the stress associated with TB breakdowns and provide advice and guidance on TB control measures.”

**Recommendation 2: That the Welsh Assembly Government establishes an ‘Intensive Treatment Area’ within a hotspot area in Wales that has experienced prolonged problems with TB, incorporating the points set out in para. 3.12 of this report. This should be funded by the Welsh Assembly Government.**

“3.12 An Intensive Treatment Area could involve:

- Investigating all cattle movements on and off farm associated with a new herd breakdown using and improving the Cattle Movement Tracking System.
- Gamma interferon testing to ensure diseased cattle are identified and removed as soon as possible.
- Testing of cattle on all farms in close proximity, e.g. within a 2km radius of a breakdown.

- If investigations find that the cause of the breakdown is not due to cattle to cattle transfer, an investigation of major species of wildlife known to carry TB should be undertaken within a 2km radius of the breakdown. Wildlife that carry and transmit TB found to show signs of the disease should be removed. A level of prevalence / rate of transmission in wildlife should be agreed upon.
- Potentially infected areas should be cleaned as well as practically possible to reduce the risk of transmission of TB to other wildlife.
- On farm bio-security should be improved with the assistance of veterinary officers, Divisional Veterinary Managers, and others.
- The progress of breakdowns on farms should be closely monitored.
- Regular reports on the progress of the Intensive Treatment Area should be made to the TB Action Group (see below) and the Welsh Assembly Government.”

**Recommendation 3: That the Welsh Assembly Government incrementally rolls-out intensive treatment to other areas of Wales if, following evaluation, it proves useful in controlling TB. Sharing of costs of funding between the farming industry and the Welsh Assembly Government should be considered.**

**Recommendation 4: That the Welsh Assembly Government establishes a Wales TB Action Group to deliver short-term measures to tackle TB in cattle and to investigate longer-term measures, as outlined in para. 3.16 of this report. Membership of the Action Group should be small and made up of those able to implement decisions, but representative of stakeholders. The Wales TB Action Group should be accountable to the Minister, but with a specific remit for action. Regular reports should be made to the Minister and publicised to all stakeholders.**

“3.16 The remit of the Wales TB Action Group could include:

- Investigating the establishment of laboratory, testing and research facilities in Wales (e.g. to undertake gamma interferon tests, which must take place within 24 hours or samples being taken).
- Considering support for farmers, such as an increased role for veterinary officers in advising on biosecurity risks.
- Consulting on introducing an industry-levy to pay for TB testing and compensation.
- Investigating other longer-term issues, such as the cattle valuation process.”

GB-wide issues

**Recommendation 5: That longer term and larger scale investigations, such as vaccine development and trials, continue to be undertaken at UK level.**

### List of those providing evidence

#### Written evidence only

Conwy County Borough Council  
Countryside Council for Wales  
Radnorshire Badger Group  
Trace Elements Services Ltd

#### Oral and written evidence

Badger Trust  
Country Land and Business Association Wales  
Farmers' Union Wales  
Gwent Badger Group  
Independent Scientific Group  
Minister for Rural Affairs  
National Farmers' Union Cymru  
Officials from the Welsh Assembly Government  
RSPCA Cymru  
Young Farmers' Club

#### Northern Ireland visit

Agri-Food and Bio-sciences Institute  
Department for Agriculture and Rural Development  
Northern Ireland Assembly Members of the Agriculture and Rural Development  
Committee  
Ulster Farmers' Union  
Ulster Wildlife Trust

## Progress report from the Welsh Assembly Government on the implementation of the Environment, Planning and Countryside Committee's recommendations

### EPC Committee Inquiry into bovine TB: Recommendation Status

<p><b>Recommendation 1:</b> That the Welsh Assembly Government takes immediate action to tackle Bovine TB in Wales, as outlined in para. 3.8 of this report. Wales' approach to tackling TB should be holistic and pragmatic involving all aspects associated with the spread of the disease. Measures should be developed in partnership with all stakeholder groups and based on current scientific knowledge.</p>			
Rec	Description	Intention	Progress Made
1.1	Implementation of pre-movement testing across Wales, with cattle sale dependent on a valid pre-movement testing certificate.	To introduce pre-movement testing of all cattle over 6 weeks of age in one and two yearly parishes as an essential disease control measure.  (See also 1.2 below)	Phase 1 of Pre-Movement Testing (PrMT) was introduced in Wales on 2 May 2006 requiring PrMT for cattle over 15 months. This was extended 1 March 2007, as part of Phase 2, to all cattle over 6 weeks old.  Up to the 31 July 2007, 122,709 animals have been pre-movement tested, disclosing 128 reactors and 291 inconclusive reactors. Without detection, these animals may have gone on to infect other herds whilst also leaving the possible source of infection on the original farm.
1.2	Increase the frequency of cattle testing in clean parishes from every four years to every two years	Regulatory Assessment carried out on increased testing frequency and PrMT options.	This measure was rejected by Ministers in favour of Pre-Movement Testing.
1.3	Introduce the use of the gamma interferon (g-IFN) test for all herds breakdowns to ensure diseased cattle are identified and removed as soon as possible.	Evidence-informed implementation of wider use of g-IFN test in specific situations where it adds value to tuberculin skin testing. Must be compatible with EU Legislation.	A total of 9,000 'ad hoc' g-IFN tests were undertaken in England & Wales in 2005 as part of the National g-IFN field trial (SB4008) and ad hoc use by Animal Health.  The recommendation of the GB g-IFN workgroup were accepted by the Minister and introduced as part of a GB policy on 23 October 2006.  Since then, and up to 31 August 2007, some 2,257 animals (from 402 herds have been tested in parallel). Of these 353 animals were positive to g-IFN.

			There have also been 475 Animals serial tested from 14 herds and which disclosed 3 positive results
1.4	Ensure that TB99 forms are completed for all herd breakdowns.	To ensure that all relevant information relating to herd breakdowns is collected and analysed in order to identify important risk factors for cattle infection.	The Disease Report Form (DRF) replaced the TB99 form in 2004. Animal Health are required to complete a DRF for all TB breakdowns
1.5	Ensure that the recommendations of the Independent Husbandry Panel are implemented on farms.	The Independent Husbandry Panel's report to the former MAFF published in May 2000, set out voluntary guidance to farmers on measures to separate badgers and cattle.	Guidance is provided by Animal Health and the Welsh Assembly Government to farmers encouraging the adoption of these voluntary measures e.g. the recent publication of the TB Husbandry Group leaflets. These are continually updated as research is completed and best practice evolves.
1.6	Collect and test wildlife in Road Traffic Accidents (RTAs) outside hotspot areas.	To extend the collection of badgers found dead in Wales outside hotspot areas. To include those found dead on public highways as well as on land in private ownership.	Between 26 October 2005 and 31 May 2006 459 suitable badger carcasses from across Wales were examined by post mortem for bovine TB as part of a Badger Found Dead Survey. A report on the survey has been published and is available on line at : <a href="http://new.wales.gov.uk/docrepos/40371/403823112/4038212/621459/Bovine_tb/BadgerFoundDead.doc?lang=en">http://new.wales.gov.uk/docrepos/40371/403823112/4038212/621459/Bovine_tb/BadgerFoundDead.doc?lang=en</a>  It concluded that badgers are an important component in the epidemiology of bovine TB in areas of high cattle incidence.
1.7	Introduce a dedicated TB helpline or TB information packs to ensure help is available for farmers to deal with the stress associated with TB breakdowns and provide advice and guidance on TB control measures.	To ensure help is available for farmers to deal with the stress associated with TB breakdowns and provide advice and guidance on TB control measures.	The Animal Health booklet ' <i>Dealing with TB in your herd</i> ' provides advice to farmers. This booklet is updated on a regular basis in line with policy developments a copy is available on line at: <a href="http://new.wales.gov.uk/depc/ahw/diseasesurveillance/1395919/Dealing_TB_herd_PDF_E?lang=en">http://new.wales.gov.uk/depc/ahw/diseasesurveillance/1395919/Dealing_TB_herd_PDF_E?lang=en</a>  The principle source of information is Animal Health and as such their Divisional Offices ensure that a Veterinary Officer is on duty seven days a week to provide advice.  Animal Health also works closely with the farmer particularly following a TB breakdown, offering advice and support where possible.  The Welsh Assembly Government has a dedicated freephone helpline (0800 5283300) which has been publicised across Wales and used extensively, particularly over the last three months.

The references for each sub-recommendation has been provided for ease of reference and were not part of the inquiry report.

<p><b>Recommendation 2:</b> That the Welsh Assembly Government establishes an 'Intensive Treatment Area' within a hotspot area in Wales that has experienced prolonged problems with TB, incorporating the points set out in para. 3.12 of this report. This should be funded by the Welsh Assembly Government.</p> <p>"3.12 An Intensive Treatment Area could involve:</p>			
Rec	Description	Intention	Progress Made
2.1	The establishment of an Intensive Treatment area in a TB hotspot.	<p>The Wales TB Action Group refined this recommendation to :</p> <p>Establish three ITA's to evaluate the implementation and effectiveness of</p> <ul style="list-style-type: none"> <li>• Increased g-IFN use</li> <li>• Improved biosecurity</li> <li>• Wildlife measures</li> </ul>	<ul style="list-style-type: none"> <li>• A national rather than local policy on g-IFN was rolled out in October 2006. See 1.3 for further details.</li> <li>• The Biosecurity Intensive Treatment Area is underway in South West Wales. This voluntary scheme pays for local veterinary surgeons to visit participating cattle keepers to provide specific advice on realistic and achievable actions for them to help reduce the risks of TB transmission.</li> </ul> <p>Farmers within the boundary of the ITA have been invited to participate in this voluntary scheme and the response to the scheme, and the first visit by local vets, has been very positive. Arrangements are in place to fully evaluate the Biosecurity ITA with a view, if appropriate, to extending it across Wales.</p> <ul style="list-style-type: none"> <li>• Possible ways forward on management of wildlife disease reservoir, including the possibility of a Wildlife Intensive Treatment Area are under consideration.</li> </ul>
<p><b>Progress in implementing the points set out in 3.12 of the Inquiry's report have been considered on a national rather than a local basis as listed below.</b></p>			
2.1	Investigating all cattle movements on and off farm associated with a new herd breakdown using and improving the Cattle Movement Tracking System.	The effective forward & backward tracing of animals associated with disease breakdowns identified by animal testing or slaughterhouse examination.	Animal Health are required to undertake forward &/or backward tracings from premises where disease is identified. Incident reports are provided weekly from the British Cattle Movement Service (BCMS) to facilitate tracings. Data can be sought regarding individual cases at any time.
2.2	Gamma Interferon testing to ensure diseased cattle are identified and removed as soon as possible.	Evidence-informed implementation of wider use of g-IFN test in specific situations where it	(See 1.3 above for progress)

		adds value to tuberculin skin testing. Must be compatible with EU Legislation.	
2.3	Testing of cattle on all farms in close proximity, e.g. within a 2km radius of a breakdown.	Complete and rapid testing of herds considered to be at high risk due to association with an identified source of infection.	Animal Health undertakes risk-based testing in herds considered to be at increased risk due to association with a breakdown herd. This includes testing of contiguous herds & tracings.  The testing of all herds within a 3km radius of a confirmed new breakdown in a 'potential new hotspot' was introduced in November 2004.
2.4	If investigations find that the cause of the breakdown is not due to cattle to cattle transfer, an investigation of major species of wildlife known to carry TB should be undertaken within a 2km radius of the breakdown. Wildlife that carry and transmit TB found to show signs of the disease should be removed. A level of prevalence/rate of transmission in wildlife should be agreed.	Animal Health required investigating source of every breakdown.  Implement additional wildlife surveillance where the relevant criteria for a "potential new hotspot" area are met.	Measures applied in potential new hotspots include the testing of badger & wild deer carcasses from within a 3km radius of a confirmed new breakdown.
2.5	Potential infected areas should be cleaned as well as practically possible to reduce the risk of transmission of TB to other wildlife.	To promote advice on best practice for cleansing and disinfecting post breakdown.	Animal Health are required to serve a cleaning and disinfection notice (BT5) on the owner of a herd experiencing a breakdown. This necessitates appropriate action from the farmer to cleanse and disinfect his/her premises.
2.6	On farm Biosecurity should be improved with the assistance of veterinary officers, Divisional Veterinary Managers, and others.	Work with Animal Health, private veterinary surgeons and other providers of guidance to assist herd owners in their responsibility to ensure the biosecurity	Guidance on biosecurity is provided by Government, Animal Health, private veterinary surgeons & others. Another aspect of this was the introduction of compulsory pre-movement testing which was introduced in Wales on 02/05/2006.  The Biosecurity ITA will consider biosecurity on a farm specific level prior to a decision being taken to introduce it more widely.

		of their herds.	
2.7	The progress of breakdowns on farms should be closely monitored.	To ensure that existing surveillance and control procedures are being applied appropriately.	The management of herd breakdowns is a responsibility of the Animal Health who report information relating to herd breakdowns, overdue tests etc on a monthly basis.  Since the introduction of Pre-Movement Testing and g-IFN the Assembly is also receiving monthly information relating these policies.
2.8	Regular reports on the progress of the Intensive Treatment Area should be made to the TB Action Group and the Welsh Assembly Government.	To provide regular progress reports.	Updates on developing issues, emerging science and progress with implementation were provided at every TB Action Group meeting.

<b>Recommendation 3:</b> That the Welsh Assembly Government incrementally rolls-out intensive treatment to other areas of Wales if, following evaluation, it proves useful in controlling TB. Sharing of costs of funding between the farming industry and the Welsh Assembly Government should be considered.			
Rec	Description	Intention	Progress Made
N/A	As above.	Optimal application of bTB surveillance & control measures in Wales	Points 2.1 to 2.8 refer to a number of activities that are being considered on a local and national scale. For example the national rollout of g-IFN and the local implementation of a biosecurity ITA. They will continue to be reviewed and applied at the relevant scale.

<b>Recommendation 4:</b> That the Welsh Assembly Government establishes a Wales TB Action Group to deliver short-term measures to tackle TB in cattle and to investigate longer-term measures, as outlines in para.3.16 of this report. Membership of the Action Group should be small and made up of those able to implement decisions, but representative of stakeholders. The Wales TB Action group should be accountable to the Minister, but with a specific remit for action. Regular reports should be made to the Minister and publicised to all stakeholders.			
<b>“3.16 The remit of the Wales TB Action Group could include:</b>			
Rec	Description	Intention	Progress Made
4	As above	To provide recommendations advice to the Minister relating to bovine TB.	The Wales TB Action Group first met on 4 November 2004, and on 17 subsequent occasions. The group was made up of experts from both industry and animal welfare groups and met with, and took advice from, a range of other experts and expert bodies, including the Independent Scientific Group (ISG). The group was disbanded prior to the May 2007 elections and current arrangements for receiving advice

			from external stakeholders are being reviewed.
4.1	Investigating the establishment of laboratory, testing and research facilities in Wales (e.g. to undertake gamma interferon tests, which must take place within 24 hours of samples being taken).	Liaise with providers of laboratory testing capacity (Veterinary Laboratories Agency, VLA) to ensure appropriate provision in Wales	VLA has confirmed that existing capacity is sufficient for current & projected g-IFN testing demand.  Funding has been provided to Veterinary Laboratories Agency for improvement of laboratory facilities at Aberystwyth to allow the post mortem of badger carcasses.
4.2	Consider support for farmers such as an increased role for veterinary officers in advising on biosecurity risks.	Wales TB Action Group to provide advice for Ministerial decision.	(See 1.5 and 2.6 above for progress)
4.3	Consulting on introducing an industry levy to pay for TB testing and compensation.	Wales TB Action Group to provide advice for Ministerial decision.	The TB Action Group recognised that this issue is being considered by a separate Joint Industry/Government Working Group.
4.4	Investigating other longer-term issues, such as the cattle compensation scheme.	Wales TB Action Group to provide advice for Ministerial decision.	The new cattle compensation system using table valuations was rejected at Plenary 23/05/06. A system of government appointed "monitor valuers" is now in place The views of the TB Action Group were considered when developing the new compensation system.

<b>Recommendation 5:</b> That longer term and larger scale investigations, such as vaccine development and trials, continue to be undertaken at UK level.			
Rec	Description	Intention	Progress Made
N/A	As above	To ensure that there is co-ordinated GB wide responsibilities and polices on surveillance, controls and research.	TB research work continues to be managed on a GB level. Work on vaccines, both badger and cattle are ongoing, there is some hope that a badger vaccine at least will be available within a few years though it is still unclear if vaccines will prove to be effective or a cost effective means of dealing with bTB.