

ANNEX I

Standard requirements for the submission of national programmes for the eradication, control and monitoring of the animal diseases or zoonoses referred to in Article 1(a)¹

1. Identification of the programme

Member State: **Ireland**

Disease(s)²: **Bovine Brucellosis**

Request of Community co-financing for³: **2010**

Reference of this document: **Brucellosis Programme 2010**

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¹ In the case of the second and subsequent years of a multi-annual programme that has already been approved by a Commission Decision, only section 1, section 7 and section 8 need to be completed.

² One document per disease is used unless all measures of the programme on the target population are used for the monitoring, control and eradication of different diseases.

³ Indicate the year(s) for which co-financing is requested

2. Historical data on the epidemiological evolution of the disease(s)⁴:

Background

The National Brucellosis Scheme commenced in 1966. Initially, a clearance area made up of the areas of lowest incidence was designated and a compulsory blood testing programme was introduced, accompanied by a system of milk ring testing. The clearance area was extended in stages until it covered the whole country. A general disease-free status was achieved throughout the country by 1986.

Since 1986 measures aimed at achieving eradication of the disease have been maintained. By 1990 the incidence had declined below 0.2%.

In the mid 1990's, there was an increase in the disease incidence, which was attributed to a temporary accelerated movement pattern of cows prompted by keepers changing the profile of their suckler herds in the light of the 1992 reform of the Common Agricultural Policy.

To deal with this increase in brucellosis levels in the 1990s, a re-vamped and intensified eradication programme was introduced in 1997 and has been continued and improved since then. The specific measures are set out in Paragraph 3. Since 1998 brucellosis levels have continued to fall, and the last confirmed case of brucellosis in Ireland was in 2006. Any positive results since then have been as a result of false positive reactions/cross reactions. Notwithstanding the fact that in March 2009 Ireland submitted an application for OBF status to the Commission, it is intended to continue the current successful programme, with some modifications, for a further buffer period as an additional safeguard. The position at the end of each of the years 1996 – 2008 is given in the following table:

⁴ A concise description is given with data on the target population (species, number of herds and animals present and under the programme), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination) and the main results (incidence, 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, graphs or maps.

| Year | Number of herds restricted |
|------|----------------------------|
| 1996 | 256 |
| 1997 | 292 |
| 1998 | 383 |
| 1999 | 228 |
| 2000 | 156 |
| 2001 | 169 |
| 2002 | 59 |
| 2003 | 55 |
| 2004 | 64 |
| 2005 | 31 |
| 2006 | 25 |
| 2007 | 32 |
| 2008 | 18 |

At the end of 1996, some 256 herds were restricted from a total of 160,000 herds, giving a point prevalence of 0.16%. At the end of 2008, 18 herds were restricted from a total of 118,095 herds, giving a point prevalence of 0.015%

The following table sets out the number of animals slaughtered under the eradication programme in the period 1996 – 2008.

| Year | No of animals slaughtered under the reactor removal & depopulation regime |
|------|---|
| 1996 | 13,000 |
| 1997 | 18,685 |
| 1998 | 26,587 |
| 1999 | 28,193 |
| 2000 | 27,514 |
| 2001 | 23,878 |
| 2002 | 20,615 |
| 2003 | 14,745 |
| 2004 | 6,015 |
| 2005 | 2,347 |
| 2006 | 388 |
| 2007 | 192 |
| 2008 | 149 |

3. Description of the submitted programme⁵:

The **objective** of the programme is the eradication of Brucellosis in cattle in Ireland and the retention of Official Brucellosis Free (OBF) status for the country (which will hopefully be achieved in 2009). If Ireland is granted Officially Brucellosis Free status in 2009, there will be some changes to the programme in place for 2009 but a comprehensive testing programme in place will be nevertheless continue to be in place in 2010.

Main Measures

The measures in place in the current comprehensive programme include the following:

Annual Herd Blood Test:

Assuming achievement of Officially Free status in 2009, the present expectation is that in 2010, all bulls and female animals aged more than 24 months, whether lactating or otherwise, in every herd will be subject to an annual blood test and, where appropriate, all other testing requirements including in particular a pre-movement test.

Pre-movement test:

In the event of Ireland obtaining OBF status in 2009, it is envisaged that the current compulsory 30 day pre-movement test will be changed to 60 days. .

By legislation, bulls over 12 months and female cattle over 18 months of age may not be sold more than once, whether by public or private sale on foot of a brucellosis test and such cattle being sold must be moved from the holding where tests are undertaken direct to either the purchaser's holding or direct to a mart and from there direct to the purchaser's holding;

Monthly bulk milk test:

A bulk milk test is carried out each month on a milk sample from each herd supplying milk. Samples are tested centrally in the Department of Agriculture, Fisheries and Food's Brucellosis Laboratory in Cork. Samples are tested using the Milk Elisa Test. Any positive result leads to the holding being restricted and the eligible animals in the herd subjected to a blood test.

Random blood testing of cows in slaughter plants ("Cull cow monitoring"):

A national programme for the random blood testing of cows in meat factories is in place. Approximately 80% of all cows slaughtered are sampled. This initiative resulted from a pilot programme, which was undertaken during 1999 which demonstrated the usefulness of this measure as a programme element. The primary aim of this aspect of the Programme is to curtail the spread of infection by dealers and to identify unreported abortions in "clear herds".

Contiguous testing:

A comprehensive contiguous testing programme is in place. All herds contiguous to a brucellosis infected holding are tested immediately and then subsequently tested a minimum of three times per year. A software mapping programme, developed by the Department of Agriculture, Fisheries and Food, is available to each office to assist staff to immediately identify herds that are possibly at risk. The software allows maps to be printed from the Department's mapping database (developed as part of the integrated administrative controls under the livestock and cereals schemes) of holdings that are contiguous to a brucellosis breakdown at a specified distance (i.e. 150 meters.) from the index herd and all fragments owned/controlled by a keeper if they occur in a wider county location. In addition to contiguous herds, the holdings of any herds "associated" on the database or otherwise with an index herd (e.g. close family relative) are also restricted and eligible animals tested.

⁵ A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination), the target animal population and the area(s) of implementation and the definition of a positive case.

Brucellin skin test:

The brucellin skin test is used as an additional test, in addition to blood testing, in certain herds and in certain areas.

Epidemiology:

A standardized epidemiological investigation and reporting format is in use for infected and non-infected herds. This facilitates disease investigation, data analysis and helps to inform policy decisions in relation to the eradication programme.

Rapid Depopulation Policy:

A policy of rapid depopulation of herds with confirmed infection is in place since 2000. This aims to limit the spread of the disease to the contiguous herds as epidemiological investigations showed that this was the main source of infection in 1999. This depopulation policy is considered an essential part of the eradication programme and the policy has been endorsed by the FVO missions in 1999 and 2002 and by the DG Sanco Task Force visit in 2002.

Extended rest periods:

After depopulation, a holding is rested for a four-month period. Since 2000, there is provision for extending the rest period of holdings following depopulation for up to 10 months in certain situations (in particular if there is evidence that infection may still be present in the area) and, where necessary, even longer periods subject to keeper agreement. During this period the holding must remain free of eligible animals.

Slurry treatment:

Since 2000, a scheme has been in place whereby slurry on all infected holdings is treated with liquid lime to “sterilise” the slurry and prevent the spread of infection via contaminated slurry. This treatment is arranged and paid for by the Department of Agriculture, Fisheries and Food. Where treatment is not possible, manure/slurry is subjected to long term storage (12 months).

Forward and back-tracing:

In all brucellosis breakdowns a comprehensive forward and backtracing exercise is carried out by the Department of Agriculture, Fisheries and Food and any at-risk animals are removed. A new computerised system is now in place (since 2004) to assist in this procedure and increase delivery efficiency levels.

Awareness campaigns:

An awareness/advisory campaign to update farmers and others on farm husbandry and management practices to curtail the spread of brucellosis is ongoing. Leaflets were distributed to all farmers in 2008 and are distributed on an on-going basis through the local District Veterinary Offices. When a new breakdown occurs, information and advice on measures to take is given to all contiguous farmers. Regular meetings on brucellosis between the farmer representative groups both at national and local levels also maintain a high level of awareness.

Vaccination:

Vaccination for brucellosis is not allowed in Ireland.

Additional measures in 2010 programme:

Any recommendations issued by the above FVO missions and task force have been incorporated into the current programme. The testing programme was fully delivered in each of the years since the new arrangements were introduced (i.e. the start of the 1996 testing programme). The comprehensive testing programme is supported by a range of support measures including the Reactor Collection Service, a secure tag identification system and a farmer awareness

strategy. A computerised movement monitoring system (CMMS) is in place, which comprehensively monitors all cattle movements. This facilitates monitoring the checking of movement of animals against animal health requirements. The computerised disease testing and management recording system has been replaced during 2004 by an updated Animal Health Computerised System (AHCS).

The strategy of the agreed programme since 1996 has been focused on placing much greater responsibility on individual keepers, inter alia, in regard to the testing of their herds so as to maximise herd health protection and certification status of herds. A key feature was that keepers themselves were made responsible for arranging annual herd tests, within timescales decided by the Minister, with their veterinary practitioners and the payment of fees directly to practitioners in respect of these tests. Any second or subsequent tests on herds are paid for by the State. Keepers and their practitioners continue to jointly develop appropriate total herd health protection strategies.

As stated, in the event of Ireland obtaining OBF status in 2009, it is envisaged that changes will be made to the current testing regime which are likely to involve moving to a 60 day pre-movement testing and the restriction of the annual test to cattle over 24 months.

4. Measures of the submitted programme

4.1. Summary of measures under the programme –The following measures are implemented:

Duration of the programme:

First year: 1996 (of current programme)

Last year: 2012

- Eradication
- Testing
- Slaughter of animals tested positive
- Extended slaughter or killing
- Monitoring or surveillance
- Eradication, control or monitoring. Other measures (*specify*):
- Other measures: As outlined under paragraph 3 including:

Epidemiological investigations of disease outbreaks, including trace-back and trace-forward of infected or potentially infected animals;

Treatment of slurry on all infected farms, by the addition of lime to raise the Ph and hence kill any brucella present in the slurry.

4.2. Organisation, supervision and role of all stakeholders⁶ involved in the programme:

The Department of Agriculture, Fisheries and Food. Overall co-ordination, management and implementation of the Brucellosis Eradication programme is conducted by the ERAD (Eradication of Animal Disease) Division of the Department of Agriculture, Fisheries and Food under an Assistant Secretary and Deputy Chief Veterinary Officer with a team of Administrative, Technical and Veterinary staff.

⁶ Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Describe the responsibilities of all involved.

4.3. Description and demarcation of the geographical and administrative areas in which the programme is to be implemented⁷:

The programme runs throughout Ireland and is managed through 28 administrative areas each with a District Veterinary Office (DVO). There is one office in each County with the exception of Co. Wicklow, which is covered by Counties Dublin and Kildare. Two DVO's cover Co. Tipperary and three cover Co. Cork. Each DVO has a team of Administrative staff, Technical Agricultural Officers and Veterinary Inspectors under the management of a Superintending Veterinary Inspector (SVI). The activities of DVOs are co-ordinated in a regional structure (4 regions) under four Regional Senior Superintending Veterinary Inspectors (SSVI).



⁷ 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.

4.4. *Description of the measures of the programme*⁸:

4.4.1. Notification of the disease: Bovine Brucellosis is notifiable under the Diseases of Animals Act 1966. Under legislation, veterinary surgeons are required to notify the Superintending Veterinary Inspector at the District Veterinary Office of details where on clinical grounds, brucellosis is suspected. Keepers who have reason to suspect that the disease may be present in their herds are also obliged to contact the District Veterinary Office. The reporting of abortions is also a legal requirement.

4.4.2. Target animals and animal population:

The target animals are all females and all entire males over 12 months of age in all herds.

4.4.3. Identification of animals and registration of holdings: Ireland has operated a system of individual bovine tagging since the 1950s. The current system is in accordance with Regulation 1760/2000. Ireland continues to maintain an individual animal passport on which the details of the animal's brucellosis tests are recorded as part of the disease control measures in operation. All holdings are registered in accordance with 92/102/EEC.

4.4.4. Qualifications of animals and herds⁹: The eradication programme is conducted under the Brucellosis in Cattle (General Provisions) Order, 1991, and amendments thereto made under the Diseases of Animals Act 1966. Herds are either Officially Brucellosis Free or, if brucellosis is suspected, their status is withdrawn.

4.4.5. Rules on the movement of animals: The eradication programme is conducted under The Brucellosis in Cattle (General Provisions) Order, 1991, and amendments thereto made under the Diseases of Animals Act 1966. All herds containing eligible animals must be blood tested at least once per year. Controlled trading rules apply to herds with restricted status (OBF withdrawn) and animals other than castrated males from such

⁸ A comprehensive description needs to be provided of all measures unless reference can be made to Community legislation. The national legislation in which the measures are laid down is mentioned.

⁹ To mention only if applicable.

herds can be sold only to a registered slaughter plant on foot of a movement permit. In OBF herds, a pre-movement test with negative results is required prior to movement for certain female and entire male animals

4.4.6. Tests used and sampling schemes: The details of the testing regime is as described elsewhere in pages 9, 10, and 11 (an annual blood test, monthly milk tests, pre-movement test). Vaccination is prohibited under this legislation.

4.4.7. Vaccines used and vaccination schemes: Vaccination is prohibited under Irish legislation.

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

In all cases where a brucellosis reactor is identified, the holding is subject to a detailed epidemiological investigation, which includes an assessment of biosecurity on the holding. This investigation is carried out by a Veterinary Inspector from the Department of Agriculture, Fisheries and Food.

4.4.9. Measures in case of a positive result¹⁰: Where brucellosis is suspected or confirmed, the holding is restricted under EU and national legislation and an animal may not be moved into or out of a restricted holding except in accordance with a movement permit. Where infection is confirmed in a herd, the entire herd is depopulated. A key objective is the quick removal of reactor animals. A National Reactor Collection Service ensures that animals are in general removed within one week of valuation agreement. Holdings are thoroughly disinfected prior to de-restriction. This function is carried out under supervision of Department Technical Officers. All animals used for restocking must come from Officially Brucellosis Free holding and, in the event of Ireland obtaining OBF status in 2009, must pass a pre-movement test within 60 days of moving onto the holding.

¹⁰ 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 the infected holding,).

4.4.10. Compensation scheme for owners of slaughtered and killed animals: It is recognised that, where reactors are removed and a holding is restricted for a prolonged period because of disease, a keeper can suffer significant loss. The programme continues to take account of this and the following compensation package is available to farmers who experience an outbreak of Brucellosis:

On-Farm Market Valuation scheme

The On-Farm Market Valuation Scheme provides for the independent valuation of reactor animals/herds slaughtered under the programme on the basis of current market prices, together with a right of appeal by the keeper or by the Department of Agriculture, Fisheries and Food. A maximum ceiling on an individual animal value is set and cannot be exceeded. On removal of an infected animal to a meat plant for slaughter, the keeper is paid for the carcass directly by the meat plant. This payment is supplemented by an additional amount paid by the Department of Agriculture, Fisheries and Food, subject to specified ceilings, such that the combination provides the agreed market value of the animal. In the case of animals which have tested positive for more than one disease, the first disease diagnosed is the basis for compensation, which in all cases can only be paid once.

Other compensation schemes

In addition to compensation for the slaughter of individual animals, the Department also provides compensation to farmers under the following schemes:

- **Depopulation scheme:** a monthly Depopulation Grant, designed to compensate for the loss of income due to depopulation, is paid for each animal removed under the depopulation measure while the holding remains under restriction preventing return to normal farming practice.
- **Income Supplement, designed to compensate for loss of income, is payable** in cases where disease breakdown results in the removal of **more than 10%** of animals in a herd and where depopulation is not deemed appropriate.

- **Hardship Grant** is designed to alleviate the additional feeding costs of some owner/keepers whose holdings are restricted on foot of a **herd re-test** during the period November to April.

Eligibility for compensation is conditional on compliance with various legislative provisions relating to the eradication programme and other national and EU legislation in the area of animal health and identification. A penalty system, which varies with the degree of non-compliance, is in place and is kept under regular review. Farmers contribute to the cost of compensation through the payment of statutory levies payable on cattle slaughtered or exported live, and on milk deliveries to creameries.

4.4.11. Control on the implementation of the programme and reporting:

Control on implementation of the programme is through the established management structure within DAFF, with local responsibility being vested in the Superintending Veterinary Inspector in each of the 28 local offices. They report through a Regional management structure to the Headquarters Division that has overall responsibility for the programme. Reporting is by way of regular management reports generated via the Animal Health Computer System (AHCS) and via quarterly Regional management meetings.

5. Benefits of the programme¹¹:

The agriculture, fisheries and food sector continues to make a significant contribution to the Irish economy and with the most recent figures available suggesting it accounts for 6.3 % of GDP at factor cost, 8.2% of employment and 10.5 % of exports. Within agriculture, the beef and dairy industries account for more than half of gross agricultural output (excluding the value of direct payments). Approximately 75% of all farmers in Ireland are involved in the production of beef and milk.

¹¹ A description is provided of the benefits for farmers and society in general.

It is evident from paragraph 2 above that the programme has been extremely effective in reducing the incidence of the disease. Given the predominant position of the dairy and beef sector in Irish agriculture and as a generator of very substantial foreign earnings from the export of livestock and livestock products, the projected expenditure of circa €6m will continue to yield significant benefits, in terms of (i) the overall health of the national cow population (ii) the production of healthy calves (some 2 million calves are born into the national herd each year) and (iii) the continued ability of Irish farmers and exporters to trade in livestock and livestock products. In these circumstances, it is evident that the ultimate objective of Brucellosis eradication and achievement of OBF status is a major animal health priority for Ireland.

6. Data on the epidemiological evolution during the last five years¹²

6.1. Evolution of the disease¹³

6.1.1. Data on herds^(a) (one table per year and per disease/species) (Note: as Ireland is one region, for convenience data for the five years 2004-2008 is included on a single table in respect of herds and a single table in respect of animals)

Years: 2004-2008

Situation on date: 31st December 2008

Disease^(b): Bovine Brucellosis

Animal species: Bovine

| Region ^(c) | Total number of herds ^(d) | Total number of herds under the programme | Number of herds checked ^(e) | Number of positive herds ^(f) | Number of new positive herds ^(g) | Number of herds depopulated | % positive herds depopulated | INDICATORS | | |
|-----------------------|--------------------------------------|---|--|---|---|-----------------------------|------------------------------|-----------------|--|--|
| | | | | | | | | % herd coverage | % positive herds Period herd prevalence | % new positive herds Herd incidence |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 = | 9 = | 10 = | 11 = |
| Ireland 2008 | 118030 | 118030 | 116184 | 111* | 111* | 0* | 0* | 98.4% | 0.10*% | 0.10*% |
| Ireland 2007 | 120654 | 120654 | 116952 | 161 | 161 | 0 | 0 | 96.9% | 0.13% | 0.13% |
| Ireland 2006 | 122392 | 122392 | 118925 | 132 | 132 | 3 | 2.08% | 97.3% | 0.11% | 0.11% |
| Ireland 2005 | 123322 | 123322 | 119963 | 144 | 144 | 27 | 18.8% | 97.3% | 0.12% | 0.12% |
| Ireland 2004 | 124414 | 124414 | 120290 | 283 | 283 | 68 | 24.0% | 96.7% | 0.24% | 0.24% |

* On the basis of further testing and detailed epidemiological investigations all 111 herds with positive serological results during 2008 were found not to be infected with brucellosis.

The serological reactions were false positive reactions.

- (a) Herds or flocks or holdings as appropriate.
- (b) Disease and animal species if necessary.
- (c) Region as defined in the eradication programme of the Member State.
- (d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.
- (e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining or upgrading, the health status of the herd. In this column a herd must not be counted twice even if has been checked more than once.
- (f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.
- (g) Herds which status in the previous period was *Unknown, Not free-negative, Free, Officially Free* or *Suspended* and have at least one animal tested positive in this period.

¹² The data on the evolution of the disease are provided according to the tables below where appropriate.

¹³ No data to provide in case of rabies.

6.1.2. **Data on animals** (one table per year and per disease/species) (Note: as Ireland is one region, for convenience data for the five years 2004-2008 is included on a single table in respect of herds and a single table in respect of animals)

Year: 2004-2008

Situation on date: 31st December 2008

Disease^(a): Bovine Brucellosis

Animal species: Bovine

| Region ^(b) | Total number of animals ^(c) | Number of animals ^(d) to be tested under the programme | Number of animals ^(d) tested | Number of animals tested individually ^(e) | Number of positive animals | Slaughtering | | INDICATORS | |
|-----------------------|--|---|---|--|----------------------------|--|--|----------------------------|---|
| | | | | | | Number of animals with positive result slaughtered or culled | Total number of animals slaughtered ^(f) | % coverage at animal level | % positive animals Animal prevalence |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9=(4/3)x100 | 10=(6/4)x100 |
| Ireland 2008 | 6150163 | 3391515 | 3391515 | 3391515 | 140* | 140* | 149 | 100% | 0.004% |
| Ireland 2007 | 6066989 | 3324511 | 3324511 | 3324511 | 192 | 192 | 192 | 100% | 0.0057% |
| Ireland 2006 | 6260133 | 3592894 | 3592894 | 3592894 | 212 | 212 | 388 | 100% | .0059% |
| Ireland 2005 | 6407456 | 3516590 | 3516590 | 3516590 | 228 | 228 | 2347 | 100% | 0.0065% |
| Ireland 2004 | 6992264 | 3600000 | 3600000 | 3600000 | 664 | 664 | 6015 | 100% | 0.0184% |
| Total | | | | | | | | | |

* On the basis of further testing and detailed epidemiological investigations all 140 animals with positive serological results during 2008 were found not to be infected with brucellosis. The serological reactions were false positive reactions.

- (a) Disease and animal species if necessary.
- (b) Region as defined in the approved eradication programme of the Member State.
- (c) Total number of animals existing in the region including eligible herds and non-eligible herds for the programme.
- (d) Includes animals tested individually or under bulk level scheme.
- (e) Include only animals tested individually, do not include animals tested by bulk level samples (e.g.: milk bulk tank tests)
- (f) Include all positive animal slaughtered and also the negative animals slaughtered under the programme.

6.2. Stratified data on surveillance and laboratory tests

6.2.1. Stratified data on surveillance and laboratory tests (one table per year and per disease/species)

Year:2004-2008

Disease^(a): Bovine Brucellosis

Animal species/category: Bovine

Description of the used serological tests:

A range of approved serological tests are used, in particular the serum agglutination test, the Complement Fixation test and the indirect Elisa test.

Description of the used microbiological or virological tests:

Bacteriological culture is carried out in accordance with the OIE manual on aborted fetuses. Culturing of glands from slaughtered animals is also carried out.

Description of the other used tests:A Milk Eliza Test is carried out each month in the Department's Brucellosis Laboratory in Cork on a milk sample from each dairy herd.

| Region ^(b) | Serological tests | | Microbiological or virological tests | | Other tests* | |
|-----------------------|---|---|---|---|---|---|
| | Number of samples tested ^(c) | Number of positive samples ^(d) | Number of samples tested ^(c) | Number of positive samples ^(d) | Number of samples tested ^(c) | Number of positive samples ^(d) |
| Ireland 2008 | 4611745 | 243 | 2100 | 0 | 211370 | 35 |
| Ireland 2007 | 4726772 | 243 | 2100 | 0 | 214561 | 35 |
| Ireland 2006 | 4819707 | 212 | 2100 | 1 | 235736 | 13 |
| Ireland 2005 | 4860891 | 228 | 2143 | 5 | 243396 | 28 |
| Ireland 2004 | 4948925 | 664 | 2068 | 4 | 271042 | 102 |
| Total | | | | | | |

*Other tests = number of bulk milk samples tested and number of samples positive; In 2008 all 35 positive milk samples results were found on follow up examination in the herds of origin to be false positive results.

- (a) Disease and animal species if necessary.
- (b) Region as defined in the approved eradication programme of the Member State.
- (c) Number of samples tested..
- (d) Number of positive samples..

6.3. Data on infection (one table per year and per disease/species) (Note: as Ireland is one region, for convenience data for the five years 2004- 2008 is included on a single table in respect of herds and a single table in respect of animals)

Year: 2003-2007

Disease^(a): Bovine Brucellosis

Animal species: Bovine

| Region ^(b) | Number of herds infected ^(c) | Number of animals infected |
|-----------------------|---|----------------------------|
| Ireland 2008 | 0 | 0 |
| Ireland 2007 | 0 | 0 |
| Ireland 2006 | 3 | 212 |
| Ireland 2005 | 27 | 228 |
| Ireland 2004 | 68 | 664 |
| Total | | |

(a) Disease and animal species if necessary.

(b) Region as defined in the eradication programme of the Member State.

(c) Herds or flocks or holdings as appropriate.

6.4. Data on the status of herds at the end of each year¹⁴ (Note: as Ireland is one region, for convenience data for the five years 2003-2007 is included on a single table in respect of herds and a single table in respect of animals)

Year: 2004-2008

Disease^(a): Bovine Brucellosis

Animal species: Bovine

| Region ^(b) | Status of herds and animals under the programme ^(c) | | | | | | | | | | | | | |
|-----------------------|--|------------------------|------------------------|------------------------|--|------------------------|------------------------------------|------------------------|---|------------------------|----------------------------------|------------------------|---|------------------------|
| | Total number of herds and animals under the programme | | Unknown ^(d) | | Not free or not officially free from disease | | | | Free or officially free from disease status suspended ^{**} (g) | | Free from disease ^(h) | | Officially free from disease ⁽ⁱ⁾ | |
| | | | | | Last check positive ^(e) | | Last check negative ^(f) | | | | | | | |
| | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) |
| Ireland 2008 | 118030 | 6150163 | 0 | 0 | 14* | 1300* | 4* | 350* | 0 | 0 | 0 | 0 | 118012 | 6148513 |
| Ireland 2007 | 120654 | 6066989 | 0 | 0 | 24 | 2500 | 8 | 650 | 0 | 0 | 0 | 0 | 120622 | 6063839 |
| Ireland 2006 | 122392 | 6260133 | 0 | 0 | 18 | 1900 | 7 | 750 | 0 | 0 | 0 | 0 | 122367 | 6257483 |
| Ireland 2005 | 123322 | 6407456 | 0 | 0 | 43 | 3302 | 6 | 520 | 0 | 0 | 0 | 0 | 123273 | 6403634 |
| Ireland 2004 | 124414 | 6992264 | 0 | 0 | 47 | 3503 | 55 | 4634 | 0 | 0 | 0 | 0 | 124312 | 6984127 |
| Total | | | | | | | | | | | | | | |

** If brucellosis is suspected in a herd, the status of the herd is withdrawn rather than suspended

* On the basis of further testing and detailed epidemiological investigations all 111 herds with positive serological results during 2008 were found not to be infected with brucellosis. The serological reactions were false positive reactions.

- (a) Disease and species if necessary
 (b) Region as defined in the approved eradication programme of the Member State
 (c) At the end of the year
 (d) Unknown: No previous checking results available
 (e) Not free and last check positive: Herd checked with at least one positive result in the latest check
 (f) Not free and last check negative: Herd checked with negative results in the latest check but not being *Free* or *Officially Free*
 (g) Suspended as defined in Community or national legislation for the respective disease at the end of the reporting period.
 (h) Free herd as defined in Community or national legislation for the respective disease.
 (i) Officially free herd as defined in Community or national legislation for the respective disease .
 (j) Include animals under the programme in the herds with the referred status (left column).

¹⁴

Only data to provide for bovine tuberculosis, bovine brucellosis, ovine and caprine brucellosis (*B. melitensis*), enzootic bovine leucosis (EBL) and Aujeszky's disease

6.5. Data on vaccination or treatment programmes¹⁵

Year: 2004 - 2008

Disease^(a): Bovine Brucellosis

Animal species: Bovine

Vaccination is prohibited under Irish legislation. Vaccination is not used as part of our eradication programmes.

Description of the used vaccination, therapeutic or other scheme:

| Region ^(b) | Total number of herds ^(c) | Total number of animals | Information on vaccination or treatment programme | | | | | |
|-----------------------|--------------------------------------|-------------------------|--|--|---|--|--|---|
| | | | Number of herds ^(c) in vaccination or treatment programme | Number of herds ^(c) vaccinated or treated | Number of animals vaccinated or treated | Number of doses of vaccine or treatment administered | Number of adults ^(d) vaccinated | Number of young ^(d) animals vaccinated |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Total | | | | | | | | |

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State
- (c) Herds or flocks or holdings as appropriate
- (d) Only for Bovine brucellosis, Ovine and Caprine brucellosis (*B. melitensis*) as defined in the programme

¹⁵ Data to provide only if vaccination has been carried out.

6.6. Data on wildlife¹⁶ - This section not relevant to Bovine Brucellosis

6.6.1. *Estimation of wildlife population*

Year: **Method of estimation^(a):**

| Regions ^(b) | Estimation of the population of the concerned wild species | | | |
|------------------------|--|----------|----------|----------|
| | Species: | Species: | Species: | Species: |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | | | | |

- (a) The hunting bag is considered to be the standard method of estimation. If other method is used, explain
- (b) Region as defined in the approved eradication programme of the Member State

¹⁶ Data only to provide in case the programme comprises measures as regards wildlife or if the data are epidemiologically relevant for the disease. .

6.6.2 Monitoring of wildlife (one table per year and per disease/species): This Section is not relevant to Bovine Brucellosis

Year: **Disease^(a):** **Animal species:**

Description of the used serological tests:

Description of the used microbiological or virological tests:

Description of the other used tests:

| Region ^(b) | Microbiological or virological tests | | Serological tests | | Other tests | |
|-----------------------|--------------------------------------|----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| | Number of samples tested | Number of positive samples | Number of samples tested | Number of positive samples | Number of samples tested | Number of positive samples |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total | | | | | | |

- (a) Disease and species, if necessary
- (b) Region as defined in the approved eradication programme of the Member State

6.6.3. *Data on vaccination or treatment of wildlife: This Section is not relevant to Bovine Brucellosis*

Year: **Disease^(a):** **Animal species:**

Description of the used vaccination, therapeutic or other scheme:

| Region ^(b) | Square km | Vaccination or treatment programme | | |
|-----------------------|-----------|--|---------------------|--|
| | | Number of doses of vaccine or treatment to be administered | Number of campaigns | Total number of doses of vaccine or treatment administered |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | | | | |

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State

7. Targets

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

7.1.1. Targets on diagnostic tests

Disease^(a): Bovine Brucellosis Animal species: Bovines

| Region^(b) | Type of the test^(c) | Target population^(d) | Type of sample^(e) | Objective^(f) | Number of planned tests |
|-----------------------------|--|---|-------------------------------------|--------------------------------|--------------------------------|
| Ireland | Serum Agglutination Test (screening), Indirect Complement Fixation (confirmation)) | All Females >12 months and all entire males >24 months old in herd tests, and all females and entire males >12 months in pre-movement tests | Serum | Surveillance | 4 100 000 |
| Ireland | Milk Elisa Test | All Dairy Herds each month | Milk | Surveillance | 210 000 |
| Ireland | Indirect Elisa | 80% of cows in slaughter plants | Serum | Surveillance | 250 000 |
| | | | | | |
| | | | | | |
| | | | | | |
| Total | | | | | |

- (a) Disease and species if necessary
 (b) Region as defined in the approved eradication programme of the Member State
 (c) Description of the test (for instance SN-test, AB-Elisa, RBT, ...)
 (d) Specification of the targeted species and the categories of targeted animals (for instance sex, age, breeding animal, slaughter animal, ...).
 (e) Description of the sample (for instance blood, serum, milk, ...)
 (f) Description of the objective (for instance qualification, surveillance, confirmation of suspected cases, monitoring of campaigns, seroconversion, control on deleted vaccines, testing of vaccine, control of vaccination, ...)

7.1.2. Targets on testing herds and animals¹⁷

7.1.2.1 Targets on the testing of herds^(a)

Disease^(b): Bovine Brucellosis

Animal species: Bovine

| Region ^(c) | Total number of herds ^(d) | Total number of herds under the programme | Number of herds expected to be checked ^(e) | Number of expected positive herds ^(f) | Number of expected new positive herds ^(g) | Number of herds expected to be depopulated | % positive herds expected to be depopulated | TARGET INDICATORS | | |
|-----------------------|--------------------------------------|---|---|--|--|--|---|--------------------------|---|---|
| | | | | | | | | Expected % herd coverage | % positive herds Expected period herd prevalence | % new positive herds Expected herd incidence |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 = (7/5)x100 | 9 = (4/3)x100 | 10 = (5/4)x100 | 11 = (6/4)x100 |
| Ireland 2010 | 118000 | 118000 | 115640 | 90* | 90* | 0 | 0 | 98% | 0.13% | 0.13% |
| Ireland 2009 | 118000 | 118000 | 115640 | 100* | 100* | 0 | 0 | 98% | 0.13% | 0.13% |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Total | | | | | | | | | | |

* It is likely that we will continue to have a low number of herds with serologically positive animals in 2009. However on the basis of further testing & detailed epidemiological investigations it is expected that these all of these will be confirmed as false positive reactions.

- (a) Herds or flocks, or holdings as appropriate.
- (b) Disease and animal species if necessary.
- (c) Region as defined in the approved eradication programme of the Member State.
- (d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.
- (e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining, upgrading, etc., the health status of the herd. In this column a herd must not be counted twice even if it has been checked more than once.
- (f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.
- (g) Herds which status in the previous period was *Unknown*, *Not free-negative*, *Free*, *Officially Free* or *Suspended* and have at least one positive animal in this period.

¹⁷ Data not to provide in case of rabies.

7.1.2.2. Targets on the testing of animals Query:

Disease^(a): Bovine Brucellosis

Animal species: Bovine

| Region ^(b) | Total number of animals ^(c) | Number of animals ^(d) under the programme | Number of animals ^(d) expected to be tested | Number of animals to be tested individually ^(e) | Number of expected positive animals | Slaughtering | | TARGET INDICATORS | |
|-----------------------|--|--|--|--|-------------------------------------|---|---|-------------------------------------|---|
| | | | | | | Number of animals with positive result expected to be slaughtered or culled | Total number of animals expected to be slaughtered ^(f) | Expected % coverage at animal level | % positive animals (Expected animal prevalence) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9=(4/3)x100 | 10=(6/4)x100 |
| Ireland 2010 | 6000000 | 3500000 | 3500000 | 3500000 | 120 | 120 | 120 | 100% | 0.004% |
| Ireland 2009 | 6000000 | 3500000 | 3500000 | 3500000 | 130 | 130 | 130 | 100% | 0.004% |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| Total | | | | | | | | | |

* It is likely that we will continue to have a low number of serologically positive animals in 2009. However on the basis of further testing & detailed epidemiological investigations it is expected that all of these will be confirmed as false positive reactions.

- (a) Disease and animal species if necessary.
- (b) Region as defined in the approved eradication programme of the Member State.
- (c) Total number of animals existing in the region including eligible herds and non-eligible herds for the programme.
- (d) Includes animals tested individually or under bulk level scheme.
- (e) Include only animals tested individually, do not include animals tested by bulk level samples (for instance milk bulk tank tests).
- (f) Include all positive animals slaughtered and also the negative animals slaughtered under the programme.

7.2. Targets on qualification of herds and animals¹⁸ (one table for each year of implementation)

Disease^(a): Bovine Brucellosis

Animal species: Bovine

| Region ^(b) | Total number of herds and animals under the programme | | Targets on the status of herds and animals under the programme ^(c) | | | | | | | | | | | |
|-----------------------|---|---------|---|------------------------|---|------------------------|------------------------------------|------------------------|---|------------------------|---|------------------------|--|------------------------|
| | | | Expected unknown ^(d) | | Expected not free or not officially free from disease | | | | Expected free or officially free from disease status suspended ^(g) | | Expected free from disease ^(h) | | Expected officially free from disease ⁽ⁱ⁾ | |
| | | | | | Last check positive ^(e) | | Last check negative ^(f) | | | | | | | |
| | | | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) | Herds | Animals ^(j) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Ireland 2010 | 118000 | 6000000 | 0 | 0 | 8 | 800 | 4 | 400 | 0 | 0 | 0 | 0 | 117988 | 5998800 |
| Ireland 2009 | 118000 | 6000000 | 0 | 0 | 10 | 1000 | 4 | 400 | 0 | 0 | 0 | 0 | 117986 | 5998600 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | |

- (a) Disease and species if necessary
 (b) Region as defined in the approved eradication programme of the Member State
 (c) At the end of the year
 (d) Unknown: No previous checking results available
 (e) Not free and last check positive: Herd checked with at least one positive result in the latest check
 (f) Not free and last check negative: Herd checked with negative results in the latest check but not being *Free* or *Officially Free*
 (g) Suspended as defined for the respective disease in Community or national legislation where appropriate or according national legislation.
 (h) Free herd as defined for the respective disease where appropriate in Community or national legislation where appropriate or according national legislation
 (i) Officially free herd as defined for the respective disease where appropriate in Community or national legislation where appropriate or according national legislation
 (j) Include animals under the programme in the herds with the referred status (left column)

¹⁸ Data to provide only for bovine tuberculosis, bovine brucellosis, ovine and caprine brucellosis (*B. melitensis*), enzootic bovine leucosis (EBL) and Aujeszky's disease

7.3. Targets on vaccination or treatment (one table for each year of implementation) Not relevant to Bovine Brucellosis

7.3.1. Targets on vaccination or treatment¹⁹

Disease^(a):

Animal species:

| Region ^(b) | Total number of herds ^(c) in vaccination or treatment programme | Total number of animals in vaccination or treatment programme | Targets on vaccination or treatment programme | | | | | |
|-----------------------|--|---|--|---|--|---|---|--|
| | | | Number of herds ^(c) in vaccination or treatment programme | Number of herds ^(c) expected to be vaccinated or treated | Number of animals expected to be vaccinated or treated | Number of doses of vaccine or treatment expected to be administered | Number of adults ^(d) expected to be vaccinated | Number of young ^(d) animals expected to be vaccinated |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Total | | | | | | | | |

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State
- (c) Herds or flocks or holdings as appropriate
- (d) Only for Bovine brucellosis and Ovine, Caprine brucellosis (*B. melitensis*) as defined in the programme

¹⁹ Data to provide only if appropriate .

7.3.2. *Targets on vaccination or treatment²⁰ of wildlife* **Not relevant to Bovine Brucellosis**

Disease^(a):

Animal species:

| Region ^(b) | Square km | Targets on the vaccination or treatment programme | | |
|-----------------------|-----------|--|------------------------------|---|
| | | 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 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | | | | |

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State

²⁰ Data to provide only if appropriate.

8. **Detailed analysis of the cost of the programme (one table per year of implementation)**

| <i>Costs related to</i> | <i>Specification</i> | <i>Number of units</i> | <i>Unitary cost in €</i> | <i>Total amount in €</i> | <i>Community funding requested (yes/no)</i> |
|--|---|------------------------|--------------------------|--------------------------|---|
| 1. Testing | | | | | |
| 1.1. Cost of the analysis | Test: Blood Sample | 3,900,000 | 0.91 | 3,549,000 | Yes * |
| | Test: Milk Sample | 210,000 | 2.292 | 480,000 | Yes * |
| 1.2. Cost of sampling | Department paid testing | 400,000 | 2.50 | 1,000,000 | No |
| 1.3. Other costs | Cow Monitoring Scheme | 250,000 | 2.16 | 540,000 | No |
| 2. Vaccination or treatment | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 2.1. Purchase of vaccine/treatment | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 2.2. Distribution costs | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 2.3. Administering costs | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 2.4. Control costs | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 3. Slaughter and destruction | | | | | |
| 3.1. Compensation of animals (Section 4.4.8 also refers) | On Farm Market Valuation & Reactor Grants | 120 | 700 | 84,000 | yes |
| | Depopulation/Hardship/Income Supplement | | | 22,500 | no |
| 3.2. Transport costs | Reactor Collection Service | | | 5,000 | no |
| 3.3. Destruction costs | <i>Not Applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 3.4. Loss in case of slaughtering | <i>Not Applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |

| <i>Costs related to</i> | <i>Specification</i> | <i>Number of units</i> | <i>Unitary cost in €</i> | <i>Total amount in €</i> | <i>Community funding requested (yes/no)</i> |
|--|---|------------------------|--------------------------|--------------------------|---|
| 3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc) | <i>Not Applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> | <i>Not applicable</i> |
| 4. Cleaning and disinfection | <i>Slurry Treatment</i> | | | <i>Nil</i> | <i>NO</i> |
| 5. Salaries (staff contracted for the programme only) | <i>Lab Salaries included in 1.1 (Section 5 also refers – General description of the costs and benefits)</i> | | | _____ | <i>NO</i> |
| 6. Consumables and specific equipment | | | | | <i>NO</i> |
| 7. Other costs | | | | | |
| <i>Travel and Subsistence Computerisation, Publicity, Printing, Valuer Fees, and Miscellaneous Items</i> | | | | <i>604,000</i> | <i>NO</i> |
| TOTAL | | | | 6,284,000 | |

*subject to any individual eligible costs ceilings

NOTE FOR INFORMATION

Please note with reference to Tables **6.6** and **7.3.2** that as Wildlife is not a factor in Bovine Brucellosis in Ireland, therefore these tables are not applicable to Ireland and they have been omitted.