

Please Note: The 2016 TB-Eradication programme, approved for co-funding by the EU, will be continued through to the end of 2018. This is therefore current policy for implementation over the next 3-years although additional controls aiming to further reduce herd incidence will undoubtedly be incorporated as time progresses. Co-funding applications will, also be submitted to the EU for 2017 and 2018 and accordingly some details for the final programmes for each of those years may consequently be modified if and as required by the Commission.

1. **Identification of the programme**

Member State: **Ireland**

Disease(s)¹: **Bovine Tuberculosis**

Request of Community co-financing for²: **2016 to 2018**

Reference of this document: **TB Programme 2016 to 2018**

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¹ 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.

² Indicate the year(s) for which co-financing is requested

subsequent study period compared with 1998-derestricted herds. The results from the study also provides further reassurance of an improved national situation, both in terms of limiting the establishment of new infection (bTB incidence) and in effectively clearing infection once detected (recurrence following derestriction).

Ireland complies fully with Commission Decision 2008/341 in that the BTBEP is based on the available relevant scientific knowledge and complies with Community legislation. The measures of the BTBEP, as selected, are the most efficient and effective measures to achieve the objective within the duration of the programme. The programme is regularly monitored and evaluated on its efficiency and effectiveness. The tools and measures adopted are cost-effective.

In summary, Ireland believes that a reduction of bTB recurrence requires effective implementation of multiple control strategies, focusing on identifying and removing residually infected cattle, and limiting environmental sources of infection, which in Ireland primarily relates to badgers. These strategies are included in the programme.

Year	Herds	No. Of newly restricted herds	% herds tested #	% Herd incidence	Cattle Population Tested	Number of Animal Tests	No. of Reactors	% animal Disease prevalence	APT **
1960	~250000		~100		4,683,700	*	139,881	2.99	-
1965					5,359,300	*	23,378	0.44	-
1970					5,956,500	*	35,982	0.6	-
1980					6,908,900	8,878,924	29,827	0.43	3.6
1985					6,907,200	11,180,602	32,608	0.47	2.9
1988	176,019	10,596	98.4	6.0	6,320,586	11,061,540	29,732	0.47	2.7
1989	172,976	13,964	97.9	8.1	6,696,431	12,436,982	43,385	0.65	3.5
1990	172,765	13,489	95.6	7.8	6,899,929	12,427,146	41,419	0.60	3.3
1991	172,272	9,873	41.9	5.7	6,840,214	8,211,384	36,832	0.54	4.5
1992	172,260	11,196	93.7	6.5	7,084,441	10,877,563	36,527	0.52	3.4
1993	168,591	10,162	94.9	6.0	7,053,913	10,446,265	30,359	0.43	2.9
1994	159,818	9,453	97.1	5.9	7,137,696	10,435,076	30,439	0.43	2.9
1995	154,401	9,518	88.7	6.2	7,174,016	10,112,939	33,180	0.46	3.3
1996	149,128	8,867	98.2	5.9	7,412,933	10,073,859	30,400	0.41	3.0
1997	145,209	8,139	98.1	5.6	7,725,634	9,919,074	28,647	0.37	2.9
1998	142,302	10,055	97.8	7.1	7,946,989	10,677,291	44,498	0.56	4.2
1999	138,263	10,660	97.9	7.7	7,569,735	10,749,580	44,903	0.59	4.2
2000	133,542	10,785	98.0	8.1	7,032,407	10,304,162	39,847	0.57	3.9
2001	130,525	9,195	95.1	7.0	7,097,430	9,402,196	33,702	0.47	3.6
2002	127,711	8,338	97.2	6.5	7,025,096	9,400,065	28,930	0.41	3.1
2003	125,512	7,771	97.2	6.3	6,937,424	9,141,551	28,002	0.40	3.1
2004	124,410	6,788	96.7	5.9	6,991,988	8,824,533	22,967	0.33	2.6
2005	123,322	6,647	97.3	5.5	6,407,456	9,060,044	25,884	0.40	2.9
2006	122,392	6,386	97.2	5.4	6,260,133	9,000,519	24,173	0.39	2.7
2007	120,652	7,046	96.9	6.0	6,084,037	9,143,719	27,711	0.46	3.03
2008	118,030	6,837	98.4	5.9	6,150,163	9,211,058	29,901	0.49	3.25
2009	117,287	5,860	98.2	5.1	6,025,656	8,963,097	23,805	0.40	2.66
2010	116,815	5,304	97.6	4.7	5,751,564	8,390,750	20,211	0.35	2.41
2011	116,061	4,780	98.5	4.2	5,819,281	8,332,285	18,531	0.32	2.22
2012	115,787	4,856	98.4	4.3	6,145,469	8,534,677	18,476	0.30	2.16
2013	115,765	4,430	98.5	3.9	6,146,958	8,474,961	15,612	0.25	1.84
2014	114,508	4,111	98.6	3.6	6,115,528	8,445,262	16,145	0.26	1.91

* Accurate figures for the total number of animal tests per year were not available until 1978.

** The APT is used as a measure of the incidence of disease compared to the level of testing being carried out. The APT figures represent the number of reactor animals disclosed per 1,000 animal level tests

Each year a number of herds have no stock for testing during the programme year. If these herds restock during the following programme year, they are tested and if they do not restock they are taken off the list of herds under the programme. These herds account for the failure to achieve 100% coverage of testing.

In view of the significant contribution of the badger culling programme to the reduction in the incidence of TB in Ireland and the likely contribution of vaccination of badgers in the future, we believe that the costs associated with badger culling and vaccination should be eligible for co-funding and we are applying for funding for these costs under this programme in accordance with Article 11 of Regulation 652/2014 which provides that costs other than those listed in Art 11(a) to (h) may be eligible for funding in exceptional and duly justified cases.

4. Measures of the submitted programme

4.1. Summary of measures under the programme

First year: 2016

- | | |
|------------------------------------|--|
| <input type="checkbox"/> Control ✓ | <input type="checkbox"/> Slaughter and animals tested positive ✓ |
| <input type="checkbox"/> Testing ✓ | <input type="checkbox"/> Killing of animals tested positive ✓ |

Last year: 2018

- | | |
|--|--|
| <input type="checkbox"/> Eradication ✓ | <input type="checkbox"/> Slaughter and animals tested positive ✓ |
| <input type="checkbox"/> Testing ✓ | <input type="checkbox"/> Killing of animals tested positive ✓ |

4.1.1 Timeline for the eradication

The specific objective of the programme is the final eradication (biological extinction) of *M. bovis* from Ireland by addressing infection with this mycobacterium in all species in which it occurs and which share the same environment, to contribute to the high level of health for humans and animals and thereby eliminate the cost of the disease and associated controls. As indicated above, having regard to the progress achieved since 2008 and taking account of the reduction in the incidence of TB in badgers in recent years and the likely future developments in relation to the vaccination of badgers, Ireland believes that the programme currently in place is an effective programme and is capable of eradicating the disease by 2030.

The operational objective of this 3-year programme, 2016-2018 inclusive, with respect to sympatric animal species in which *M. bovis* causes infection is to continue to progressively reduce the measured and measureable disease parameters such as prevalence in wildlife and domestic species that act as maintenance hosts for *M. bovis*.

With respect to humans the Health Protection Surveillance Centre <http://www.hpsc.ie/> collates and publishes figures on the incidence of TB in humans attributed to *M. bovis* and the annual number of such cases each year is 6 (2011), 4 (2012), 5 (2013) and 3 (2014) [not all cases relate to Irish born people]. For TB cases born in Ireland the peak age group is >64yrs and without a current identified exposure risk it is probable that the exposure is historical in nature.

4.1.2 Interim targets in relation to the timeline for eradication

The interim objective is to reduce the herd incidence of TB by 60% by 2020 compared with 2013 levels.

4.2 Organisation, supervision and role of all stakeholders¹⁰ involved in the programme:

4.2.1. Programme and Policy

The initiation and drafting of the programme and policy is the responsibility of the ERAD (Eradication of Animal Disease) Administrative and Veterinary HQ Divisions of the DAFM under the responsibility of a Director of Animal Health and Welfare and Deputy Chief Veterinary Officer (DCVO). In consultation with ERAD HQ, the programme delivery is implemented through the Department's regional Veterinary offices (RVOs) which are operated and managed by Area Management teams (AMTs) whose main function is to ensure delivery of the programme and verification of the effectiveness of controls.

4.2.2. Veterinary Laboratory Services

The Veterinary Laboratory Services (VLS) comprises the Central Veterinary Research Laboratory (CVRL) and the Regional Veterinary Laboratory (RVL) at Backweston in Co. Kildare, the Brucellosis Laboratory, Cork, and five RVLs located in Athlone, Cork, Kilkenny, Limerick and Sligo. The Bacteriology/Parasitology Division of the VLS provides a number of services to the BTEP, including:

¹⁰ 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.

7. Targets

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

7.1.1. Targets on diagnostic tests 2016 to 2018

Disease^(a): Tuberculosis Animal species: Bovines.

Region ^(b)	Type of the test ^(c)	Target population ^(d)	Type of sample ^(e)	Objective ^(f)	Number of planned tests
Ireland 2016	Tuberculin Skin test	All Bovines	SICCT	Programme implementation	8,500,000
Ireland 2016	Gamma Interferon Assay	Bovines	Heparinised Blood	Programme implementation	25,000
Ireland 2016	Bacteriological	Bovines	Tissue	Programme implementation	2427
Ireland 2016	Strain Typing	Bovines	Culture	Programme implementation	1000
Total					8,528,427
Ireland 2017	Tuberculin Skin test	All Bovines	SICCT	Programme implementation	8,500,000
Ireland 2017	Gamma Interferon Assay	Bovines	Heparinised Blood	Programme implementation	25,000
Ireland 2017	Bacteriological	Bovines	Tissue	Programme implementation	2913
Ireland 2017	Strain Typing	Bovines	Culture	Programme implementation	1200
Total					8,529,113
Ireland 2018	Tuberculin Skin test	All Bovines	SICCT	Programme implementation	8,500,000
Ireland 2018	Gamma Interferon Assay	Bovines	Heparinised Blood	Programme implementation	25,000
Ireland 2018	Bacteriological	Bovines	Tissue	Programme implementation	3495
Ireland 2018	Strain Typing	Bovines	Culture	Programme implementation	1400
Total					8,529,895

(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, 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 animals²³

7.1.2.1 Targets on the testing of herds^(a)

Disease ^(b) : Tuberculosis		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
2018	114,400	114,400	112,798	2,481	2,368	30	1.3	98.6	2.2	2.1
2017	114,700	114,700	113,094	2,940	2,878	30	1.0	98.6	2.6	2.5
2016	115,000	115,000	113,390	3,742	3,515	30	0.8	98.6	3.3	3.1
Total										

(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.

²³Data not to provide in case of rabies.

7.1.2.2. **Targets on the testing of animals**

Disease^(a): Tuberculosis

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
2018	6,500,000	6,500,000	6,370,000	5,987,800	14,000	14,000	15,000	98.4	0.22
2017	6,500,000	6,500,000	6,370,000	5,987,800	14,500	14,500	15,500	98.4	0.23
2016	6,500,000	6,500,000	6,370,000	5,987,800	15,000	15,000	16,000	98.4	0.24
Total									

- (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.