EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Food sustainability, international relations

Unit D4 - Food safety programmes, Emergency funding

Programmes for eradication, control and surveillance of animal diseases and zoonoses submitted for obtaining EU financial contribution

Annex I.b: Programme for the eradication of bovine tuberculosis, bovine brucellosis or sheep and goat brucellosis (*B. melitensis*)

Member States seeking an EU financial contribution for national programmes of eradication, control and surveillance shall submit online this document completely filled out by the 31 May of the year preceding its implementation(part 2.1 of Annex I to the Single Market Programme Regulation).

Due to the late adoption of the SMP regulation all programmes will be submitted to be approved technically for 2021 and 2022.

Therefore , this document shall also be filled out and submitted after selection of the options:

This programme is multiannual: "YES"

Request for Union cofinancing from beginning 2021 to end of 2022.

If encountering difficulties:

- concerning the information requested, please contact SANTE-VET-PROG@ec.europa.eu.
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5) For simplification purposes you are invited to submit multi-annual programmes.

6) You are invited to submit your programmes in English.

Document version number: 2021 2.1

Member state : IRELAND

Disease	Bovine Tuberculosis
Species :	Bovines

This program is multi annual : yes

Type of submission : New multiannual programme or Modification of already approved multiannual programme

Request of Union co-financing from beginning : 2021 To end of 2022

First year of implementation of the programme described in this document: *2021*

1. Contact data

Name [redacted] Phone [redacted]

Email [redacted] Your job type within the CA : [redacted]

Submission Date

12/07/2021 09:35:09

Submission Number

1626075311324-17175

2. Historical data on the epidemiological evolution of the disease

Describe timeline with prevalence, incidence data and, where relevant, vaccination history covering at least the past 5 years.

(max. 32000 chars) :

See attached Annex 1 Prevalence and Incidence timeline.

3. Description of the submitted programme

Describe the disease control strategy of the eradication programme in accordance with Article 16 of Commission Delegated Regulation (EU) 2020/689 including at least:
(a) the sampling schemes and diagnostic methods to be used in accordance with Annex IV to Delegated Regulation (EU) 2020/689:
(i) for the granting of the disease-free status to establishments and the maintenance of that status;
(ii) to confirm or rule out the disease in the event of a suspected case;
(b) the disease control measures to be applied in the event of a confirmed case;
(c) the biosecurity and risk mitigating measures to be implemented;
(e) the measures to be implemented as regards additional animal populations, if relevant;
(f) the derogations to be applied in accordance with Article 19 of Delegated Regulation (EU) 2020/689, if relevant;
(g) coordinated measures with other Member States or third countries, if relevant.

(max. 32000 chars) :

(a) the sampling schemes and diagnostic methods to be used in accordance with Annex IV to Delegated Regulation (EU) 2020/689:

The principal test used in the programme is the Single Intradermal Comparative Tuberculin Test (SICTT). Ireland applies normal standard interpretation with respect to interpretation of reactions and with respect to test interpretation in routine surveillance and low risk test situations. Standard interpretation is defined as follows:
(a) positive: a positive bovine reaction which is more than 4 mm greater than the avian reaction, or the presence of clinical signs;
(b) inconclusive: a positive or inconclusive bovine reaction which is from 1 to 4 mm greater than the avian reaction, and the absence of clinical signs;
(c) negative: a negative bovine reaction, or a positive or inconclusive bovine reaction but which is equal to or less than a positive or inconclusive avian reaction and the absence of clinical signs in both cases.
A more severe interpretation of the SICTT is used in herds with reactors on test or for herds listed for high risk test types - all test types other than a type 1 (annual round test) and 3 (inconclusive reactor test) or a test listed for a herd categorised as Atypical where detailed investigation has not confirmed the presence of M Bovis.
Where one or more standard interpretation positives are found in a 'clear' herd (i.e. Officially Tuberculosis Free (OTF) status before the test) standard interpretation inconclusive reactors are identified as reactors and recorded on the test report - unless instructed by the RVO to the contrary. The RVO may instruct to the contrary in so called atypical herds i.e. that subset of herds that behave in an atypical manner in that they produce unusually large numbers of no visible lesion (NVL) unconfirmed

reactors; and experience repeat 'reactor' episodes and where a potential Non-specific infection (NSI) problem must be suspect. Where the herd is undergoing a contiguous test, all standard interpretation inconclusive reactor animals must be identified for removal as reactors unless specific instructions in respect of the herd and interpretation have been received from the Veterinary Inspector.
All veterinary practitioners approved to test under the programme are given a copy of the interpretation chart. In addition the software approved by DAFM for testing alerts the Private Veterinary Practitioner (PVP) to the test result if inconclusive or positive at the appropriate interpretation level. Veterinary Inspectors are ultimately responsible for ensuring that each test is interpreted at the appropriate level. VIs are also required as part of the epidemiological assessment of a breakdown to review the herd/area test history and the animals within or originating from the infected group and in addition to give consideration to removal of additional animals on the basis of current or previous test measurements, use of additional assays and/or epidemiological considerations including depending on the extent of the infection, removal, as reactor, of animals 'inconclusive' to the severe interpretation chart or positive at the bovine site (straight bovine i.e. as if the Single Intradermal Test was conducted).

Interferon-y assay
The Interferon-y assay is used as an adjunct to the SICTT in bTB infected herds. This test makes available a mechanism to remove infection from the herd earlier than on foot of the follow-up SICTT retest set at a mandatory minimum of 60 days from the removal of the last positive reactor. In all herds experiencing a high risk breakdown classified as a 'H' breakdown, following disclosure of reactors to the SICTT, consideration is given to having the remaining animals, particularly breeding animals and animals not destined for slaughter within a short time, blood tested so that additional infected animals will be removed. The assay is implemented without waiting for post-mortem or laboratory confirmation of infection, when and where it is epidemiologically evident that the herd is infected. It is used as a quality control mechanism in herds with 3 or more reactors and is also used as a diagnostic tool in herds with 5 or more reactors for herd sizes up to 100, for herds with 5% or more of the herd testing positive for herd sizes >100 and for all herds with 10 or more reactors or where it is otherwise warranted on epidemiological grounds. In addition Interferon-y-assay testing is carried out on animals which test inconclusive to the SICTT see below for further details.

Annual "Round" screening test
Ireland requires each herd to be tested at least once every 12 months. Approximately 7m SICTT animal tests are carried out under the annual herd test regime by PVPs. These tests are paid for by the farmer but DAFM pays for the tuberculin.
Consequential testing
Herds and animals in restricted herds are risk-categorised on the basis of infection levels and are subject to a customised testing (interpretation and test frequency) regime. The epidemiological investigation indicates the focus of risk and relevant epidemiological linkages and thus forms the basis for requiring testing (termed special check testing) outside the normal frequency of testing in OTF herds. The title of the test (test type) also determines the prioritisation for completion e.g. a round test is the annual test issued for those herds with risk category D (default) – this is the lowest risk category – and, while it must be completed within the prescribed time frame (i.e. yearly), it has the lowest priority. Approximately 2m supplementary animal SICTTs are carried out each year and these are paid in full by DAFM. These tests primarily concern supplementary tests carried out in restricted herds, contiguous herds and forward and backward traces.

Pre//post movement testing
Ireland is implementing the requirements under Annex IV, Part II, Chapter 1 EU Reg 2020/689 on a phased basis. Initially animals moving from herds with a history of bTB in the past 4 years will be

required to have a SICTT in the 30 days immediately preceding the movement or within the 30 days immediately after the movement provided they have been kept in isolation. If both the animal and the herd from which they are moving have tested negative to a SICTT during the preceding 6 months this test will not be required. Ireland plans to roll out this requirement to the rest of the bovine population in early 2022.
Post Mortem Surveillance:
Post mortem surveillance of animals slaughtered for human consumption and traceback of all granulomatous lesions detected with restriction of supplying herd pending laboratory diagnosis is a fundamental part of the BTBEP. Some 1.8M bovines are slaughtered annually. All lesions suspected as being tuberculosis at post-mortem examination are subject to laboratory examination. Where a granulomatous lesion (suspect bTB) is detected at a slaughter plant in a carcase from an animal originating in a clear herd, the holding is immediately restricted, (OTF status suspended) the suspect lesion is subjected to laboratory examination and if bTB is confirmed the OTF status is withdrawn and the herd is then subjected to the appropriate testing regime.

(i) for the granting of the disease-free status to establishments and the maintenance of that status;

Granting of OTF status
All herds in existence in Ireland have achieved OTF status at some point in the past under previous legislation. There are no herds of unknown status in Ireland. Operators seeking to establish new herds may only do so from the population of herds who have OTF status. Where the animals are sourced from herds with a history of bTB in the past 4 years they will be required to have a SICTT in the 30 days immediately preceding the movement or within the 30 days immediately after the movement provided they have been kept in isolation. If both the animal and the herd from which they are moving have tested negative to a SICTT during the preceding 6 months this test will not be required.
These new herds are suspended and are not permitted to trade other than directly to slaughter until the herd is established. A period of two months is allowed for this purpose. At the end of the two month period a standstill period is applied where herds are not permitted to move animals into the herd. The herd continues to be suspended during this standstill period of two months after which a SICTT is carried out. If the herd tests clear OTF status is granted to the herd.

Maintenance of the status:
Herds will maintain their OTF status so long as there are no suspect or confirmed cases of infection, the herd carries out a SICTT with negative results at intervals of not more than 12 months, and if purchasing animals from herds with a history of bTB in the past 4 years the animals will be required to have a SICTT in the 30 days immediately preceding the movement or within the 30 days immediately after the movement provided they have been kept in isolation. If both the animal and the herd from which they are moving have tested negative to a SICTT during the preceding 6 months this test will not be required.

Overdue tests
The maximum amount of time that can elapse before a herd's OTF status is suspended, where an annual round test is overdue, is 25 days. In practice it is normally less than this. Additionally, animals are prevented from being traded via markets or farm-to -farm on the annual anniversary of their previous test and thus effectively the status of such animals is de-facto suspended immediately. Where consequential type tests are concerned, i.e. tests related to a disease breakdown, because of the higher risk involved, where the test has not been completed and signed off by the testing Practitioner 5 days after the test due date, the herd's OTF status is automatically suspended. In accordance with Article 20 2. (b) of EU Regulation 2020/689 if after a period of 18 months the test has not been completed the OTF status of the herd will be withdrawn.

(ii) to confirm or rule out the disease in the event of a suspected case;

Laboratory analysis
Laboratory analysis is routinely performed on tissues from animals coming from OTF herds where visible lesions are found at regular post mortem inspections. Laboratory tests are also carried out in cases where a single animal tests positive to an immunological test, known as the Singleton Protocol (see below) and where there is a doubt as to the agent infecting the herd.
Inconclusive animals
A standard inconclusive reaction is defined as a bovine reaction which is greater than 2mm, and where the bovine reaction is from 1 to 4mm greater than the avian reaction and the absence of clinical signs. On disclosure of an inconclusive reactor the OTF status of a herd is immediately suspended. The animal is then either:
(a) Retained in the herd but will be subject to a interferon-y-assay blood between 7 & 30 days post disclosure. Positive animals are removed as reactor and the herds OTF status is withdrawn. Negative animals subjected to a SICTT 60 days post disclosure. Should the animal pass the SICTT, the herd suspension is lifted, and the animal is subject to an Interferon-y-assay test on a six-monthly basis. Positives on these tests are removed as reactors and the herds OTF status is withdrawn. Any animal that has been disclosed with an inconclusive reactor response, and that passes the mandatory retests is prevented from moving for the duration of its lifetime, except to slaughter or exceptionally to an establishment under the supervision of DAFM from where it shall move within a reasonable time frame direct to slaughter.
Or
(b) The animal is slaughtered immediately and if no visible lesions on post mortem the balance of the herd is subject to an SICTT a minimum of 60 days after disclosure, if clear the herds OTF status is restored.
Or
(c) The animal is slaughtered immediately and samples are harvested for laboratory analysis. If the samples test negative for bTB the herds OTF status is restored.

(b) disease control measures to be applied in the event of a confirmed case;

In the case of positive results, the holding of origin is restricted, the status of the herd is withdrawn, (or suspended) and reactor animals are removed for slaughter. The reactor animals are valued by independent valuers and compensation as appropriate is paid. Controls on the movements of animals are put in place. Cleansing and disinfection is carried out and slurry and manure storage requirements are specified. A quality control visit is carried out on the farm where possible within 5 working days of the disclosure of reactors to check the quality of the test, isolation of reactors, withholding of milk, identification of contiguous herds, animal welfare, testing facilities and to carry out an epidemiological investigation into the likely source of the disease. Advice is given on risk reduction measures and biosecurity. Appropriate follow up testing is carried out. Interferon-y assay testing may be carried out. Trace back and trace forward of animals is carried out. Contiguous testing programmes may be set up. Wildlife control may be carried out if the outbreak is epidemiologically linked to badgers. If badgers are implicated in the breakdown in the “index herd” a badger removal programme will be instigated (if not already operating) in the same area, taking into account the limitations on such badger removal necessitated under the Berne Convention and agreement with the responsible Irish competent authority. If it is clear that badger paths extend from the holding of the index herd to one or more other farms outside the 25 metres contiguity list then such farms will be added to the contiguous testing programme.

Standard requirements for the submission of programme for eradication, control and monitoring

Movement into infected herds
Movement into herds which are not OTF are restricted as required by Article 26 of the Commission Delegated Act supplementing Regulation 2016/429. Movements in are allowed where a Risk Mitigation Plan (RMP) is put in place to reduce the risk of spread to or from the moved in animals. Where the disease situation changes the permission to move in may be changed or cancelled.
The following categories of exceptions are provided for:
• Assembly of newly established herds (OTF status suspended)
• Introduction of a replacement stock bull(s) (The bull must have passed a bTB test within the previous 30 days)
•Emergency replacement suckler calf (where a calf suckling a cow dies and must be replaced)
• Movement into an establishment that is under the supervision of DAFM.

Movement out of infected herds
Movement of animals out of herds which are not OTF are not permitted other than directly to slaughter or to establishments under the supervision of DAFM. The OTF status of these establishments is suspended and the animals can only move out of these establishments direct to slaughter. Such establishments can only achieve OTF status if all of the animals in the establishment have been slaughtered.

Contiguous Herds
Herds which are adjoining a herd experiencing a high risk breakdown (2 or more infected animals with infection acquired and/or transmitted within the herd) are placed on a programme of testing whereby a herd test is scheduled for the herd each 4 months while infection is still being identified in an index herd. The programme of testing in the contiguous herds runs while the index herd is undergoing reactor retesting. Those herds which are placed on the contiguous testing programme, which have not been tested within the previous 4 months, are restricted, and their trading status is temporarily suspended (other than animals moving direct to slaughter), pending test completion. As long as these herds remain OTF and on the programme, the same trade suspension pending test will apply from the 4-month anniversary of their previous test. RVOs may authorise permission for inward movement of stock under permit for a period not exceeding 30 days from the date of restriction. Free-trading status will be immediately restored once the herd reacts negatively to the test. In this manner, movement of potentially infected animals from such herds is controlled. Animals can therefore only move when the contiguous herd and therefore the animals have been tested. The current minimum size of the contiguous testing area is all herds with any lands within 25 metres from the boundary of the index herd. The list is generated for herds 150 metres from the index herd and those herds >25 metres are marked for testing.

Tests are additionally conducted on herds with epidemiological links, including traceback and trace-onward checks, indicating a risk of infection.

Recent restoration of OTF status
All high risk bTB infected herds are scheduled for test between 3 and 8-months post OTF status restoration and, following this test, herds are placed on a 6-monthly herd-testing regime for the succeeding year. The first test may take place at a time of the farmer's choosing between 3 months after de-restriction but no later than 8 months after de-restriction. The herd may move animals out for a maximum of 3-months before the herd is automatically trade restricted with trading status suspended. To be trade restricted means that the herd may acquire cattle but may not dispatch cattle (other than calves under 6 weeks of age) except directly to slaughter from the date the restriction is applied. The trade suspension remains in place until the first full herd test is completed, between 3-8 months post-

OTF status restoration. After the first test is completed, if clear, the herd must complete 2 further tests at 6 monthly intervals.
In low risk herds where there is no evidence of within herd spread a 6 months post de-restriction test is the only further testing required. However there are two distinct subsets of low risk herds where infection with M. bovis is not confirmed:
•Singleton herds and
•Clear herds where there is a suspect factory lesion and no post mortem or laboratory confirmation of M bovis.
Those herds which qualify for the singleton protocol in addition to there being only 1 reactor the criteria for consideration for this protocol are as follows:
1) the bovine minus avian increase differential must be less than 12 millimetres
2) no oedema present at the bovine site.
3) the herd must not have had its OTF status withdrawn due to bTB during the 3 years prior to this reactor and
4) none of the contiguous herds are concurrently undergoing a High risk breakdown.
The disease status of these herds is 'suspended' rather than 'withdrawn' and the holding is restricted. The holding will be de-restricted where the criteria for eligibility continue to be met: bTB is not confirmed at post mortem, laboratory examination is negative, the herd has been subjected to SICTT conducted at least 42 days after the removal of the reactor animal and the results of the herd level SICTT are negative.

Depopulation:
Serious consideration is given to herd depopulation, full or partial, where the level of infection in the herd is such that, despite standard and repeated tuberculin testing, the application of the Interferon-y-assay, epidemiological assessment and strategic removal of individual animals within the herd, disease continues to spread. Decisions on depopulation are made exclusively on disease and epidemiological grounds with the interest of disease control in the herd and the local area of primary concern. The herd or infected group must be subjected to the Interferon-gamma assay where it has not already been used, and then the suitability for removal of the entire infected group (partial depopulation or in-contact removal) must be assessed. When the assay and/or in-contact removal has failed to resolve the problem, depopulation of the herd must be considered. Depopulation must also be considered where the epidemiological assessment determines that control of bTB in the herd or area will be otherwise compromised such as by an inability to implement satisfactory controls in the herd. Where herd depopulation has been deemed necessary, the SVI determines an appropriate rest period for the land usually of about four months during which the keeper may not restock. Furthermore, unless badgers have been excluded as a cause of the outbreak a badger capture programme will be conducted and a programme of testing undertaken in contiguous herds. Where depopulation is necessary to ensure infection is removed from a herd or to remove a source of infection to a neighbourhood, it takes place in the entire epidemiological unit. Experience has shown that the strategic use of the gamma assay can often be equally effective in terms of clearing a herd of infection without the necessity to kill healthy non-infected animals with the result that increased and judicious use of the Interferon-y assay has reduced the imperative to depopulate herds.

Establishments under the supervision of DAFM
Establishments under the supervision of DAFM are known Controlled Finishing Units (CFUs). A 'CFU' herd designation exists solely in the context of a bTB diagnosis in the herd, withdrawal of OTF status and restriction. A CFU is a subset within those herds that operate a beef fattening enterprise. Only a small number of beef herds meet the criteria for designation as a CFU when diagnosed with bTB.
CFUs in Ireland are not restricted to indoor fattening. Irish cattle are primarily reared on grass-based diets

and Irish beef is marketed throughout the world as grass-fed. Several biosecurity and disease mitigation conditions apply to CFUs. These include that the unit is a non-breeding specialised beef finishing enterprise. The herd must not have any neighbour contacts i.e., either exclusively in yards/ building or if intending to graze cattle the grazing block of land is secured so there can be no contact with cattle e.g. surrounded by tillage, residential/industrial/recreational units or impenetrable rivers, roads or walls. Most importantly there must be no evidence of within herd acquisition or spread of bTB. Such herds are permitted, when restricted, to continue to acquire animals for fattening so as to maintain a viable enterprise. Normally animals are acquired exclusively from b free status herds for such CFUs. A CFU, being de-facto a bTB restricted herd (OTF status withdrawn), is not permitted to sell cattle on the open market other than directly to slaughter.
When a herd that meets the criteria to be regarded as a 'CFU' the herd is restricted under the TB Regulations, either by virtue of test reactors or detection of M. bovis in a slaughtered animal, and when veterinary opinion is that there is no evidence of a within-herd bTB focus or spread of infection, a special official supervisory and testing protocol is established to, as far as possible, facilitate the enterprise to function as a commercial entity while complying with animal health legislation and practice. Such herds are not exempted from testing, reactor removal or disinfection requirements. Thus a CFU herd, is a herd that poses minimal risk of infecting other cattle because of effective isolation from other herds. As with all OTF status withdrawn herds whenever an infected animal is detected in or from such herds the area VI will epidemiologically assess the likelihood of within herd acquisition and spread of infection and take appropriate action. OTF status will only be restored to a restricted CFU herd in full compliance with Regulation (EU) 2020/689.

Enhanced actions to clear infection from extended breakdown herds
Where herds are experiencing an extended outbreak of bTB with evidence of continuing transmission of infection despite the removal of reactors, a programme of enhanced disease control actions is applied in order to clear infection from the herd and reduce its future risk. These are tailored to the risks present in the herd and are implemented in addition to the statutory actions required for all breakdowns. These include:
i) A detailed investigation to identify and remove all sources of infection, including biosecurity risks, environmental contamination, residual infection, wildlife risk and other sources
ii) The use of additional targeted tests to identify infected animals in an escalating manner including severe interpretation of the SICCT, the removal of cattle showing a bovine reaction to tuberculin regardless of avian response, a second round of gamma interferon testing and the use of ELISA testing
iii) The progressive removal of groups of cattle deemed to be higher risk in an escalating manner including cattle which have ever exhibited a bovine bias on the SICCT (even where this was not sufficient to deem them reactors) and cattle within high-risk cohorts. Examples of higher risk cattle include older cattle and cattle which were present during previous episodes of bTB.

Action plans for areas with increased localised bTB levels
Where higher levels of bTB are occurring in certain areas, action plans are put in place to address the risks and reduce disease spread. This is done by:
i) Supporting research on methodologies to define and identify such areas in a consistent way;
ii) Investigating the local factors driving the increase in disease and the actions needed to mitigate these drivers;
iii) Providing advice and information to herdowners in the area; and
iv) Additional testing of at-risk and contiguous herds in the area.

Increased focus on non-restricted herds with a high risk chronic history of bTB
Herds which are not currently restricted but have a history of several breakdowns, or of a large extended

breakdown, are at a higher risk of another bTB outbreak after they go clear and they also present a higher risk to neighbouring herds. Cattle sold from these herds also present a greater risk of transmitting disease to other herds. The herds most at risk of recurrence, estimated to be approximately 300-500 in number, are targeted for additional support and controls. Enhanced support is provided to these herds so that they can reduce their risk of recurrence and stay clear, while also reducing the risk of transmission of undetected infection onwards to other herds. This includes a tailored bTB Risk Management Plan (RMP) for each of these herds, designed by a veterinarian familiar with the herd and the local context. These herds will have a prolonged testing period during the post-derestriction phase, including the possible use of the Interferon-y-assay to counteract desensitisation cause by multiple applications of tuberculin. It is envisaged that this policy will significantly reduce the risk of movement of infected animals from these herds to other herds.

(c) the biosecurity and risk mitigating measures to be implemented - see section 4.4.8.
(e) the measures to be implemented as regards additional animal populations, if relevant - see section 4.4.2
(f) the derogations to be applied in accordance with Article 19 of Delegated Regulation (EU) 2020/689 - Not relevant.

(g) coordinated measures with other Member States or third countries if relevant.
We share a common border land border with Northern Ireland across which wildlife moves freely. On the basis of the criteria set out in the Annex to Commission Decision 341/2008 vis '(2) Geographical demarcation of the programme - The programme shall apply to the whole territory, or if properly justified according to epidemiological criteria, to a well-defined part of the territory of one or more Member States or, in case of diseases that affect also wild animals, third countries.' DAFM shares data in relation to bTB breakdowns in counties along the border with its counterparts in Department of Agriculture, Environment and Rural Affairs (DAERA) Northern Ireland, to achieve the common goal of eradication of bTB on the island of Ireland.

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Duration of the programme : 2021 - 2022

- ☒ Eradication
- ☒ Testing
- ☒ Slaughter of animals tested positive
- ☐ Vaccination

Other, please specify

Culling/vaccination of badgers.

4.1.1 Timeline for the eradication

Describe the timeline with prevalence, incidence data and, where relevant, vaccination history covering at least the past 5 years and the estimated duration of the eradication programme

The estimated date for achievement of eradication of bTB (OTF status) previously been set at 2030. In light of recent trends, Ireland considers that this target may require further assessment. Targets are important to motivate stakeholders towards a common objective but that goal needs to be attainable to garner support.
Ireland's BTBEP Programme is comprehensive in nature and addresses all transmission channels in a focused manner. The Programme is heavily influenced by scientific research and resources are targeted in a risk-based efficient and effective manner.
See attached Annex 1 Prevalence and Incidence timeline.

4.1.2 Interim targets in relation to the timeline for eradication

Describe the intermediate targets of the eradication programme including at least:
(a) the expected annual decrease of the number o infected establishments;
(b) the expected annual increase of the number of disease-free establishments;
(c) the expected vaccination coverage, where relevant. (max. 32000 chars) :

The interim objective is to reduce the herd incidence of TB to 3% by the end of 2023. See table 7.1.2.1.
Experience from BTBEP Programme data over several decades has illustrated caution should be exercised in interpreting annual data. Irish experience indicates that disease trends do not trend in a linear manner. Therefore, it may be more appropriate to consider a 5-yr moving average in herd incidence as an indicator.
Another element which cautions against interpretation of annual statistics is the effect of programme enhancements such as enhanced protocols. Significantly increased use of gamma interferon testing has led in the short term to increased numbers of reactors being revealed. It is expected that this aggressive approach to the removal of infected animals will in the short-term augment the number of positive animals but should result in decreased persistence and spread in the medium to long-term.
Similarly, the application of high impact bTB control plans to areas experiencing a higher level of disease lead to an increased number of restrictions as disease spread is halted; this short-term increase is necessary in order to attain long-term reductions in disease.

The disease statistics reported by Ireland exaggerate the incidence of actual disease in the country. This arises from the fact that there are approximately 1,000 herds, each year in Ireland, where reactors are identified and removed but bTB is not confirmed. This is as a consequence of the Specificity (Sp) of the

Single Intradermal Comparative Tuberculin Test (SICTT) which is in the region of 99.985%. As Ireland is a country that has bTB it is not possible to determine the precise Sp of the SICTT. However, even with a Sp of 99.985%, there will be false positive reactors ~15/100,000 tests. At current level of testing in Ireland (~8M individual animal tests) some 1,200 animals will test positive, even if there was no actual infection, and a ~1% herd incidence consequently is to be expected. If, as it has done to date, Ireland continues to report every herd with a test reactor, regardless of bTB confirmation or not, (and the test is done accurately) herd incidence will not decline below 1% and thus this base line 1% is factored into the expected decline in herd incidence and has to be taken into account in assessing achievement of the target set.

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

Describe the organisation, supervision and roles of the parties involved in the eradication programme including at least:
(a) the authorities in charge of coordinating and supervising the implementation of the programme;
(b) responsibilities of all stakeholders involved.

(max. 32000 chars) :

Programme and Policy
The initiation and drafting of the BTBEP and policy is the responsibility of the ERAD (Eradication of Animal Disease) Administrative and Ruminant Animal Health Veterinary HQ Divisions of the DAFM under the responsibility of a Director of Animal Health and Welfare and Chief Veterinary Officer (CVO). In consultation with ERAD HQ, the BTBEP delivery is implemented through DAFM's Regional Veterinary Offices (RVOs) which are operated and managed by Area Management teams (AMTs), each consisting of a Senior Superintendent Veterinary Inspector (SSVI), a Senior Veterinary Inspector (SVI), a Regional Assistant Principal (R/AP) and an Area Superintendent (AS), covering the North and South of the country. The AMTs main function is to ensure delivery of the programme and verification of the effectiveness of controls. A Superintending Veterinary Inspector (SVI) oversees the veterinary aspects of the programme within each RVO. Within the RVOs each Veterinary Inspector (VI) is assigned responsibility for a geographical area, within which the VI investigates bTB breakdowns, performs epidemiological analysis and is the primary decision maker with respect to individual herd management.

(b) responsibilities of all stakeholders involved.

TB Stakeholder Forum and working groups
Stakeholder participation in critical in the BTEP. The TB Stakeholder Forum comprises of representatives from across the industry as well as DAFM officials. The remit of the Forum was initially to propose amendments to the existing programme which fed into the new Bovine TB Eradication Strategy 2021 – 2030 which was published in early 2021, see link here. https://www.gov.ie/pdf/120577/?page=1.
The forum's deliberations focused on four pillars:
• Working in partnership;
• Acknowledging roles and responsibilities;
• Prevention is better than cure; and
• Reflecting Costs and Benefits.

The Forum is continuing its work overseeing and reviewing the implementation of the policies set out in the Bovine TB Eradication Strategy. In order to achieve eradication, DAFM recognises that the commitment of all stakeholders is essential in implementing the current policy effectively on and introducing new policies to achieve eradication.

Standard requirements for the submission of programme for eradication, control and monitoring

Laboratories
This includes the Central Veterinary Research Laboratory (CVRL) and the Regional Veterinary Laboratory (RVL) at Backweston in Co. Kildare, the Brucellosis Testing Laboratory (BTL), Cork, the Centre for Veterinary Epidemiology and Risk Analysis (CVERA), Irish Equine Centre (IEC) and five RVLs located in Athlone, Cork, Kilkenny, Limerick and Sligo. The Bacteriology/Parasitology Division of the CVRL provides a number of services to the BTEP, including:
- Culture and histopathological examination of diagnostic samples, including those submitted from the slaughterhouse surveillance programme;
- Potency assays on the bovine tuberculin protein purified derivative used in the SICTT in conjunction with staff from ERAD division;
- DNA 'fingerprinting'/strain typing and whole genome sequencing of M. bovis isolates;
-Evaluation of new methods for the identification and typing of M. bovis;
- Laboratory services in CVERA are additionally contracted to provide specific support services to the programme routine and developmental work on Interferon-γ Assay, evaluation of new serological tests to aid bTB diagnosis, support for badger vaccine development and deployment.
The BTL performs Interferon-γ testing. Badger post mortem examination and badger primary tissue collection for submission to the CVRL for culture, are performed in the IEC and the RVLs. In addition passive surveillance in many species is performed in the RVLs and any findings relevant to M Bovis are reported to HQ.

Veterinary Public Health Inspection Service
The Veterinary Public Health Inspection Service (VPHIS) of DAFM in conjunction with, and under Service Contract to the Food Safety Authority of Ireland (FSAI) is responsible for ensuring food safety in slaughtering premises, cutting premises, cold stores, meat and meat products premises, and poultry slaughtering establishments. VPHIS, has a permanent staff complement of veterinary inspectors and technical staff and engages private veterinarians on a part-time basis. All cattle presented for slaughter in the State undergo an ante-mortem and post-mortem inspection under the control and supervision of the VI in charge of the plants in which cattle are slaughtered, or, in the case of abattoirs, under the control and supervision of the veterinary staff of the various Local Authorities. For the purpose of Regulation (EC) No 854/2004, supervision of the Local Authority (i.e. smaller, locally based) slaughter plants is also conducted under contract to the FSAI (Food Safety Authority of Ireland). All lesions suspected of being tuberculous detected at slaughter, from either DAFM or Local Authority Veterinary Services (LAVS) approved beef slaughter plants are submitted for laboratory examination to the CVRL and pending determination of the outcome the supplying herds are restricted (status suspended).

Keepers
Individual keepers are responsible for the testing of their herds so as to maximise herd health protection and certification status of herds. In particular, they are responsible for arranging annual herd tests, with their private veterinary practitioners (PVPs), within timescales prescribed for them by DAFM in order to comply with the Directive, and for payment of test performance fees directly to PVPs in respect of, in general, one test/annum. Farmers, in addition contribute towards the general cost of the eradication programme including research, reactor transport and additional compensation measures via a levy system. Consultations on the operation of the BTBEP are held at local and national level between DAFM and the Farmer Organisations (representing the keepers) on a regular basis. The fact that farmers contribute to the overall cost of the programme, ensures that they are significant stakeholders in the programme and who by their contribution reduce the cost burden on both the Irish exchequer and the claims made to the EU when the programme is co-funded.
Private Veterinary Practitioners

TB testing is, in general, performed by authorised PVPs, who are contracted to comply with the terms and conditions set out by DAFM for tuberculin testing. PVPs are also reminded each year of the professional advice that they should provide to their clients in respect of bTB and procedures when an outbreak has been detected or is underway. DAFM ordinarily pays for the performance of any tests under the programme additional to the legal yearly test requirement or pre-movement tests.
Before attending a herd to test PVPs must obtain a download of the herd profile from the Animal Identification and Movement system (AIM) database via the Animal Health Computer system (AHCS) in order to ensure that all animals in the herd are presented and tested; this is also subject to computer checks when the test report is submitted to the AHCS.

Milk Processors
Trade in milk is governed by Regulation 2004/853/EC of the European Parliament which establishes that milk originating from herds that do not have OTF status must be heat-treated and that milk from animals showing a positive or inconclusive reactor result to the tuberculin test must not be used for human consumption. Milk from the healthy animals in the herd can be used in the manufacture of milk products but must first undergo a heat treatment equivalent to pasteurisation provided authorisation has been granted. DAFM informs persons to whom milk is supplied of the restriction or de-restriction of a herd under the programme. During the visits to the reactor herds, checks are carried out to ensure that reactors are isolated, that milk from reactor/inconclusive reactor animals is not being supplied to the food business operator (FBO) as per milk supply contract between producer and FBO and that it is being properly disposed of and records of same are being maintained. Notices informing the FBO that a supplier herd is experiencing a breakdown and the number of cows involved (including inconclusive reactors) are automatically generated and sent by the AHCS.

Valuers
In general, suitably qualified valuers, who are authorised by DAFM, value reactor animals on the basis of current market values and by reference to guidelines drawn up by DAFM staff. DAFM personnel visiting reactor herds will also report any visible defects of the reactors that might downgrade valuation, for cross referencing against the relevant valuation reports.

Reactor Collection Service
Reactors are, in general, transported free of charge from the holding to designated factories for slaughter. This service is operated by DAFM on the basis of contracts awarded to private hauliers following a tender procedure. Hauliers are subject to supervision by the DAFM.
Slaughterplants tendering to receive reactors
Reactor animals (apart from exceptional cases where no compensation is payable to the farmer) are slaughtered by plants selected by the DAFM on the basis of a weekly tendering arrangement. Prices paid by the plant for reactors are monitored by ERAD on a regular basis.

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

Describe territorial scope with a description and demarcation of the geographical and administrative area covered by the eradication programme and the names of the zones and regions, if more than one region is included in the territorial scope of the programme.

(max. 32000 chars) :

The Department of Agriculture Food and the Marine (DAFM) is the competent authority.
Ireland has a centralised administrative structure, i.e., no separate autonomous regions, 16 Regional Veterinary Office (RVOs) units serve the 26 counties and 29 District Veterinary Office (DVO) areas. See Annex 2 Geographical demarcation.

4.4 Description of the measures of the programme

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

4.4.1 Notification of the disease

(max. 32000 chars) :

Notification of the disease
Bovine Tuberculosis is a notifiable disease under national legislation through the Animal Health and Welfare Act 2013 and the Animal Health and Welfare (Bovine TB) Regulation 2015. In line with this legislation, veterinary practitioners, keepers and others who have reason to suspect that the disease may be present are required to notify the SVI at the RVO.

4.4.2 Target animals and animal population

Describe the epidemiological situation for each zone or region, if more than one region is included in the territorial scope of the programme:
(a) the number of establishments keeping animals of the targeted animal population by health status (Disease-free, infected or unknown) excluding establishments falling under the derogation to be applied in accordance with Article 19 of Delegated Regulation (EU) 2020/689 at 31 December;
(b) the number of animals of the targeted animal population kept in the establishments referred to in point (a) by health status;
(c) maps indicating the density of the targeted animal population referred to in point (b) by health status
and
(d) information as regards the epidemiological situation in additional animal populations, where relevant. *(max. 32000 chars) :*

See Annex 3 Position at 31/12/20
All of the bovine herds in the country are included in the programme. However, each year some herds will have no stock and therefore will not be tested during the year. If these herds restock during the following year, they will be tested and, if they do not restock, these herds will be taken off the list of herds under the programme for the year after.
All bovine animals in Ireland are included in the programme. In OTF herds undergoing test calves <6 weeks of age are routinely exempted from test. In all other test situations calves < 6 weeks are subjected to test. There is no category of herd, or individual animal > 6 weeks old or animals involved in cultural or sporting events excluded or exempted from tuberculin testing. A number of animals will not be tested in the current year for the following reasons because they are either too young on the date of the herd test, they die before the herd test is due, or they move into a herd after the annual herd test has been completed in that herd and their test expires before the herd is due to be tested again.

Goats
Apart from bovines, there are no animals routinely tested under the programme. Dairy goat herds are required to have a bTB control plan in place under Regulation (EC) 853/2004 laying down specific rules for food of animal origin. Under this plan, goats that die on farm require post mortem, goats slaughtered for human consumption will have veterinary examination and a number of skin tests are performed on a risk basis relating to the biosecurity, animal husbandry, exposure risk and size of the herd . If dairy goats are on a holding with cattle they must be tested at the same frequency as the cattle. If (non- dairy)

goats are present with a bTB confirmed herd these are also required to be tested and, if there are test failures, or bTB is suspected in these or any other species, it is compulsory to notify DAFM. Any animals of a susceptible species slaughtered for human consumption have a veterinary ante- and post- mortem.

4.4.3 Identification of animals and registration of holdings including detailed reference to relevant Union legislation and its implementation in the Member State for this disease

(max. 32000 chars) :

All establishments keeping bovine animals are registered in accordance with Regulation (EU) 2016/429, Commission Delegated Regulation (EU) 2019/2035 and National SI 58 of 2015. The current national system for the identification of bovines, SI 77 of 2009, is in accordance with Regulation 1760/2000. Ireland currently continues to maintain an individual animal passport/identity card. DAFM is currently liaising with stakeholders with regard to the technical details relating to the introduction of mandatory electronic identification of bovines.

4.4.4 Qualifications of animals and herds including detailed reference to relevant Union legislation and its implementation in the Member State for this disease

(max. 32000 chars) :

The eradication programme is conducted under the Animal Health and Welfare (Bovine Tuberculosis) Regulations 2015 and the Animal Health and Welfare Act 2013. Every herd in Ireland that keeps bovine animals is included in the bovine TB eradication programme including fattening herds. There are no herds in Ireland of unknown status, all herds in Ireland were brought up to OTF status prior to 1980. The granting, maintenance and suspension and withdrawal of qualifications are done in accordance with Commission Delegated Regulation (EU) 2020/689, see section 3 (a) (i).

AHCS has been programmed to ensure compliance with the is maintained and is reprogrammed as necessary to ensure compliance with additional measures as they are included in the programme. At the end of each year, Ireland reports to the EU as required under article 14 of Regulation EU No 652/2014 on surveillance done and suspect submissions for laboratory investigation from non-bovine domestic and wild species.

4.4.5 Rules of the movement of animals including detailed reference to relevant Union legislation and its implementation in the Member State for this disease

Please detail also the rules existing for transhumance and common grazing areas, if any.

(max. 32000 chars) :

See also section 3 (b) the disease control measures to be applied in the event of a confirmed case.

Identification and testing
A bovine animal may only be moved out of or into a herd or accepted for routine slaughter at a registered abattoir/slaughter plant if the individual animal is identified and properly documented (passport or a movement permit). Bovine animals may not be moved into a herd or from a herd, except direct to slaughter, unless the herd from which it comes and the individual animal have been tested within the previous 12 months. See also section 3 (a) regarding pre/post movement testing under Commission Delegated Regulation (EU) 2020/689.

Export of Animals:
Ireland carries out 30-day pre-movement TB testing on all eligible bovines exported to the EU. in accordance with Regulation (EU) 2021/403. AIM programming via linkage with AHCS ensures that only eligible animals from OTF herds meeting all relevant criteria will be issued Animal Health Certificates for export. Movement control, from a disease and movement eligibility perspective, is enhanced by the linkage of the AHCS with AIM at export locations, markets and slaughter premises which ensures that movement of ineligible animals is prevented or detected, in addition, under national legislation, Animal Health and Welfare (Bovine Movement) Regulations 2014 (SI 521 of 2014), Ireland requires all animals moving from one holding to another to be checked against the AIM database before moving. In the event of a detection of an ineligible animal at a market, AIM sends an alert message to the RVO(s) with responsibility for the herds involved. With regard to farm to farm movements, without transit through a market, the AIM system requires all such movements to be subject to the prior issue of a "Compliance Certificate" by the system; the certificate will be refused for ineligible animals. The most recent bTB test dates for individual animals are displayed at point of sale in markets and for animals in the herd are available to the keeper who has access to his herd profile electronically.

4.4.6 Tests used and sampling and testing schemes including detailed reference to relevant Union legislation and its implementation in the Member State for this disease (including herd frequency per region, animal coverage in each herd, interpretation rules of the test,...)

For bovine tuberculosis, please detail how the quality/reliability of the skin-testing is ensured/verified (training and supervision of field veterinarians, recheck of some officially-free herds by the official veterinarians, quality insurance system in force if any, etc. ...)
Please detail also how the surveillance of bovine tuberculosis is monitored in slaughter houses (Training of vets, monitoring of the lesions submission rates and positivity rates, link with the field vets in case of positive results, etc. ...)

(max. 32000 chars) :

See also section 3 (a) regarding the sampling schemes and diagnostic methods to be used in accordance with Annex IV to Delegated Regulation (EU) 2020/689.

Quality control
In order to optimise the performance of the SICTT the potency, as assayed by the manufacturer in guinea pigs, of the tuberculin, avian and bovine, used in the BTBEP are matched so as to not exceed a maximum of 500 I.U. potency difference per dose between both. In addition also so as to maximise the sensitivity (Se) Ireland routinely assays the potency of bovine tuberculin in naturally infected cattle. This conforms to the World Health Organisation (WHO) (Technical Report series No. 384) recommendation that potency testing should be performed in the animal species and under the conditions in which the tuberculins will be used in practice. The potency of the bovine tuberculin used under the Irish programme for the last 10-plus years has been in the order of 50,000 I.U./ml as assayed in cattle and this conforms to the OIE recommendations for tuberculin used for a bTB eradication programme.

Consistent application of the test in compliance with national and international requirements is critical to the success of the eradication programme and to providing security to importing countries.
PVPs are subject to ongoing monitoring and supervision by DAFM. In Ireland, supervision and quality checks on skin tests conducted by field veterinarians consist of on the spot supervisory checks and administrative checks.
Furthermore herds experiencing an outbreak of bTB are subjected to epidemiological investigation by DAFM personnel. During field visits by DAFM personnel, additional quality control checks are carried out on-farm, with respect to testing facilities, the reactor animals with regard to the appearance, location and regression of reactions, fitness to transport and aspects of animal welfare.
All categories of tests are subject to quality control including those in negative herds. Quality control of testing in negative herds is monitored through traceback of cattle detected with bTB subsequently through either testing carried out in herds they moved into, or through detection of lesions at routine slaughter. These metrics are used to identify private vets for risk-based inspection. In addition, where a private vet detects substantially fewer reactors than would be expected based on local bTB levels and the numbers of reactors detected by other vets in that area, this is used to identify vets for risk-based inspection. Targeted selections of samples are taken for correlation with Interferon-γ assay for quality control purposes. Consultations on the operation of the BTBEP are held at local and national level between DAFM, PVPs and the PVP representative organisations.

4.4.7 Vaccines used and vaccination schemes including detailed reference to relevant Union legislation and its implementation in the Member State for this disease

Describe the vaccine(s) to be used and the vaccination scheme, if relevant;

(max. 32000 chars) :

Not applicable.

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

Please detail also the situation as regard to this disease in the wildlife, and explain the surveillance and control measures in wildlife if any, and the coordination between the stakeholders involved (hunters, farmers, official service labs, vets, etc ...)

(max. 32000 chars) :

(c) biosecurity and risk mitigating measures to be implemented;

General information on biosecurity measures and management
Farmers are reminded at least annually via the notification to test letters that they need to be aware of the necessity to adopt good biosecurity practices to avoid the entry to and the spread of disease on their holdings. In particular they are reminded to:
- maintain the security of boundary fences
- minimise contact between their herd and neighbouring or other cattle
- quarantine cattle entering their holding either from another holding or on return from a mart or show

etc.
- isolate sick animals
- observe good general good hygiene measures with, for example
a. the provision of disinfection footbaths and overalls for personnel visiting their premises
b. providing clean drinking water
c. securing feedstores to prevent access by livestock, wildlife or vermin
d. providing secure clean feeding troughs not accessible to wildlife and
e. rodent control measures.
In addition a series of leaflets, leaflets and videos have been developed and disseminated to the farming community. These covered a series of biosecurity related topics including:
- Effective cleansing and disinfection
- Protecting your herd from wildlife
- Protecting your herd from residual TB infection
- Protecting your herd from TB infected cattle
- How the tests work and their limitations
These provide clear information on the ways in which bTB can spread and how these transmission routes can be blocked or mitigated. They may be viewed here: www.bovinetb.ie

A simplified bovine TB herd risk categorisation is assigned to each bovine herd. This categorisation is based on the number of years a herd has tested clear of bTB and the number of breakdowns a herd has experienced in the previous 10 years. Updated categorisations are available to keepers on line or on request from their RVO. Keepers are encouraged to enquire about the bTB Herd risk categorisation of herds they are purchasing animals from.
National and local newsletter are developed and issued in areas experiencing a high level of bTB infection giving practical advice on biosecurity and risk reduction measures including the culling of animals that were alive during a previous breakdown and inconclusive animals that re-tested clear.

DAFM is currently funding national experts in Behavioural Research to design the most effective policies that will influence farmers to take action in reducing their bTB risk. This research will inform future policy.

Standardised RVO bTB annual meetings
Regional Veterinary Offices (RVOs) host annual meetings to update their local stakeholders on bTB developments at both a national and regional level. These meetings provide an important forum for farmers, farm organisations and veterinary practitioners to discuss disease dynamics with regional DAFM officials and understand how the risk of disease transmission can be mitigated. Annual bTB meetings are held by each RVO. These meetings provide updates on national and local disease developments and advise on how to reduce the risk of bTB.

Biosecurity measures to be applied in the event of a confirmed case
Advice on appropriate bio-security measures is provided by DAFM to keepers via direct advice from the local RVO in the event of a bTB breakdown. An epidemiological investigation is carried out to determine the likely source of the disease and the results are communicated to the farmer. A Risk Mitigation Plan (RMP) must be in place prior to the authorisation of movement of animals into a restricted holding and prior to the restoration of OTF status. In the event of a future bTB breakdown compliance with the previous RMP is checked and non-compliance may result in a reduction of compensation payable. The RMP is developed by the VI for the herd on the basis of the results of the epidemiological investigation. This plan includes the requirement to cleanse and disinfect the establishment.
The risk mitigation plan may include some of all of the following actions:
- Only purchasing animals from a higher TB herd risk category,

- 30 day pre-movement test,
- Isolation of moved in animals from infected groups,
- Confinement of original resident animals to the infected fragment(s) of the holding,
- Cleansing and disinfection of houses and other areas,
- Cooperation with ancillary testing, including GIF testing,
- Full herd skin test,
- Fencing off badger setts/latrines,
- Making sheds, drinking/feeding troughs inaccessible to badgers,
- Not feeding concentrates on the ground,
- Playing an active role in assisting the Department of Agriculture to identify badger setts and activity on the holding,
- Improving fencing to prevent nose to nose contact with contiguous herds,
- Culling of older high-risk animals as they reach the end of their production cycles,
- Any other measures deemed appropriate.

Provision of advice on biosecurity by private veterinary practitioners
A programme to train PVPs in bTB specific biosecurity and herd health advice and to deliver targeted advisory support on animal health (TASAH) visits specifically on TB to herds experiencing serious breakdowns is in place. This bTB TASAH programme will expand in 2022.

Improving biosecurity in markets
There are 86 livestock markets (also known as marts) in Ireland, and movement through a market is a known risk factor for bTB. All marts are required to be licensed and to comply with strict conditions. These conditions of approval include having written procedures in place governing cleansing and disinfection, having the necessary equipment and supplies for disinfecting vehicles, machinery, and equipment used in connection with livestock, and are subject to regular inspection by DAFM staff.

Badger Vaccination and Removal
Badgers are vaccinated by veterinary staff with BCG to reduce the transmission of TB between badgers. This has been demonstrated in field trials to reduce the Reproduction number (R0) in badgers from 1.2 to 0.5. A further field trial was published in 2020 which indicated that this has a similar effect as badger removal in reducing the spread of TB from badgers to cattle. Therefore the badger vaccination programme in Ireland has a crucial role in reducing the risk of TB in cattle from a badger source. The removal of badgers in areas around a farm where epidemiological investigation indicates a badger source will remove the risk associated with confirmed breakdowns.
The large scale roll out of badger vaccination that commenced in late 2019 was completed in early 2020. This resulted in the area of Ireland subject to vaccination increasing from 7,806 Km2 at the start of 2019 to 19,079 Km2 at the end of 2020. In 2020 the focus was on identifying as many new setts as possible to ensure good population penetration in badger vaccination areas. The wildlife video from www.bovinetb.ie was texted to farmers twice during the year to seek assistance from farmers in finding badger setts. This was part of the Stop/Stop/Tell initiative where farmers were asked to take biosecurity precautions to Stop badgers accessing cattle at feeding/drinking at troughs, feedstores and yards; Stop cattle accessing badger setts and latrines at pasture and Tell Department wildlife officers of any badger setts they know of. Wildlife officers added 2,917 new setts to the spatial database in 2020
In 2020 3,004 badgers were vaccinated in the vaccination zone and 4,723 badgers were removed in the removal capture blocks. See attached Annex 4 Badger Vaccination Area 2020.

Deer
International studies (USA, UK and New Zealand) have concluded that wild deer are normally only spill-

over hosts of bTB, only becoming maintenance hosts when density is high and only significant in transmitting bTB to cattle when both species co-mingle at feeding/meeting locations where forage is shared. The interface where cattle and deer overlap in Ireland is more complex in that badgers also forage in these habitats and in the same area as the deer and thus deer may also be a source of infection in badgers and vice versa. If there are concerns in a local area that deer may be infected with M bovis, local farmers can arrange to have deer shot and DAFM will carry out laboratory testing on the carcases free of charge. If this reveals a significant problem, DAFM support the local coordination by landowners of deer culling. In 2022, this policy continues, underpinned by recent scientific research funded and supported by DAFM which used whole genome sequencing (WGS) to demonstrate that M bovis is circulating between cattle and deer in the Wicklow area. It remains unclear as to whether deer pose a challenge to bTB eradication in Ireland similar to the badger. DAFM will continue to fund research to assess this to inform future policy.

4.4.9 Measures in case of a positive result including detailed reference to relevant Union legislation and its implementation in the Member State for this disease

A description is provided of the measures as regards positive animals and detailed reference to the Union legislation provisions (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, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter. A definition of a suspicion and of a confirmation should be provided, with detailed measures implemented in both situation and how the herd is requalified as free after a positive result. Detailed information should also be provided as regard the epidemiological investigations done, and the additional laboratory tests foreseen (culture, PCR, IFGamma, etc ...). Please mention if national guidelines are available.

(max. 32000 chars) :

See section 3 (b)

4.4.10 Compensation scheme for owners of slaughtered and killed animals

(max. 32000 chars) :

The programme takes into account the income loss experienced when a herd is restricted and reactors are removed. Compensation in line with market values is provided for under the On-Farm Market Valuation Scheme. Prior to their removal, reactor animals are valued on the basis of current market prices, with a right of appeal provided for the keeper. The keeper is paid the carcase-salvage value directly by the slaughter plant and the differential between this salvage value and the market valuation is paid by DAFM. Compensation reflects individual animal market value as if they were not affected by disease, but is subject to legislative ceilings. Compensation entitlements are subject to compliance with the rules of the scheme, the Directive (64/432/EEC) and also other legislative obligations such as bovine animal identification Regulations (1760/2000).

Compensation payable under the Bovine TB Eradication Scheme is legislated for under the Animal Health and Welfare Act 2013 (No.15 of 2013) and Animal Health and Welfare (Bovine Tuberculosis) Regulations 2015 (S.I. No 58 of 2015) and in line with other criteria laid down by the Minister.

The On-Farm Market Valuation Scheme is the principal compensation measure available to herdowners.

Under this scheme animals identified as TB reactors are slaughtered and the herdowner is compensated for the market value of the animals up to maximum ceilings. Valuations are carried out by independent Valuers from a panel established by DAFM. An appeals system operates where either the Herdowner or DAFM is dissatisfied with the valuation. A penalty system for Valuers, which varies with the degree of non-conformance, is in place. Further to proposals from the bovine TB Stakeholder Forum, DAFM commissioned a report to review the OFMV. Consideration of any recommendations are in line with the principle of supporting disease eradication.

Depopulation Grants may be payable to herdowners whose herds are depopulated (totally or partially) in the interest of disease control. Such grants are conditional on the holding, or depopulated portion thereof, remaining free of stock during the rest period. Grants are generally paid for each animal removed and for those removed as reactors from the time the holding was restricted. There are strict conditions on the payment of this grant and the herdowner must agree to depopulate at the time specified by the RVO.

Income Supplement is payable in cases where disease breakdown results in the removal of more than 10% of animals in a herd or in respect of Dairy herds where at least 10% of dairy cows are removed in the relevant restriction period and where depopulation is not deemed appropriate. Payment is in respect of each animal removed as a reactor from a herd. A monitoring programme was introduced in 2017 which examines those herds in a continued breakdown and in receipt of income supplement. This programme ensures that correct procedures are being carried out in order to reduce the likelihood of the breakdown continuing and to ensure penalties are imposed where non-compliance is identified.

Hardship Grants are also available, subject to the herdowner meeting strict eligibility conditions. This grant is designed to alleviate the additional feed costs incurred by some herdowners whose holdings are restricted on foot of a herd retest and where animals are retained and fed during periods of restriction. The eligibility period runs from 1 November to 30 April.

The measures outlined above are designed to compensate farmers for the replacement cost of removed animals, income loss (e.g. lower milk sales) arising from their removal, and for additional costs associated with feeding animals during the winter months over a prolonged restriction period.

4.4.11 Control on the implementation of the programme and reporting including detailed reference to relevant Union legislation and its implementation in the Member State for this disease

Please indicate also when the last FVO audit has taken place and provide a table listing the recommendations and the actions taken by the national authorities to this regard.
Please mention if a Task Force subgroup visit has taken place and the state of play as regards the implementation of the recommendations suggested if any.

(max. 32000 chars) :

Controls on implementation include scheduling of tests, checks on testing returns, rapid removal of infected animals, epidemiological investigations and all aspects of the programme, including evaluation of results, delivery and quality control aspects. To facilitate control and implementation, considerable use is made of computerised systems developed by the Competent Authority specifically for the task, such as Animal Health Computer System (AHCS), Herdfinder and the Animal Identification and Movement (AIM) database.
• AIM is live at markets, export points and slaughterhouses. Through linkage to AHCS AIM provides

information in real time before sale/slaughter on animal status, bTB test data and movement/export eligibility, information including an animal's compliance with identification, Animal Health requirements and eligibility for sale/slaughter. In particular, certification of live animals for export may only be completed if all checks on AIM confirm full eligibility.
• AHCS is live at all but the smaller slaughterhouses. This ensures prompt recording of detection of suspect bTB granulomas, notification of detections to RVOs and thereby ensures prompt restriction of supplying herds pending laboratory examination of the detected granuloma.
• Linkage of AHCS and the Laboratory Information System (LIMS) at the CVRL ensures that samples submitted to the laboratory from
- smaller slaughterhouses, under contract to the Food Safety Authority of Ireland, or
- other locations
will be notified to RVOs so that supplying herds may be restricted as appropriate. This linkage also ensures that RVOs may monitor the progress of samples through the laboratory.
• Linkage of Veterinary Practitioners electronically to AHCS is designed to facilitate herd profile production (download) immediately preceding testing and prompt upload of test results to DAFM RVOs.
• The AHCS and the AIM are interlinked and thus more closely monitor the testing of the national herd, ensure that animals cannot evade the annual or any herd-level test, allows greater analysis of data, trace-onward/back and epidemiological investigation tracking.
• The Geographic Information System based 'Herd Finder' programme, incorporating mapping data as submitted by farmers to support claims for payment under EU funded support schemes, is used to rapidly locate and identify herds that may be, or may have been, at risk of exposure.
• Veterinary Inspectors in RVOs who have received specific training in bTB programme management, including familiarisation with DAFM computerised systems, epidemiological investigation, PVP supervision techniques etc., serve as a local resource to others involved in the BTBEP.
• Additionally, resources have been allocated to continue to provide intensive laboratory analysis, including culturing and strain typing at DAFM's CVRL.
•Furthermore all systems are under continuous review and upgrade to ensure that they perform optimally and ensure full compliance with both legislation and the programme.
A series of dedicated and specific periodic reports are produced, via the above systems, as a routine to monitor programme implementation and delivery on an on-going basis as well as trends in the incidence of the disease, quality control of testing veterinarians, quality control of DAFM implementation etc. These reports are examined in the context of regular meetings of the ERAD Management Committee. Further data generated by the programme are analysed so as to determine specific risk factors, that may militate against disease eradication or where modification of the programme would be indicated.

Dissuasive action in the case of non-compliance:
Where farmers fail to comply with the requirements of the BTBEP, a number of actions can be taken ranging from warning notices and restriction of the herd, to requiring farmers to pay for testing otherwise payable DAFM, to sanctions on or non-payment of compensation, to penalties on payments under other EU funded schemes and, ultimately, to prosecution.

The last FVO audit on TB specifically took place in 2014 and there were no recommendations. There was a second one on milk in 2015 and there was one recommendation in relation to record keeping which has been implemented. The last visit from the Task Force subgroup took place in 2014. See attached Annex 5 Task Force Recommendations.

5. Benefits of the programme

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

- progress expected compared to the situation of the disease in the previous years, in line with the objectives and expected results
- cost efficiency of the programme including management costs

(max. 32000 chars) :

The agriculture, food and the marine sector continues to make a significant contribution to the Irish economy. Within agriculture, approximately 70% of output value is from the production of beef and dairy. 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, expenditure on the BTBEP will yield significant benefits, in terms of improving (i) the overall health of the national herd population and (ii) the ability of Irish farmers and exporters to trade in livestock and livestock products.

It is widely recognised that there are significant public and private benefits to the Programme. DAFM has commissioned an independent Cost Benefit Analysis of the Programme to apportion benefits between the State and industry. This analysis will be used to inform an appropriate financing share of the Programme in line with the principle of shared ownership.

The objective of the programme is the eradication of bTB in Ireland. The existence of bTB in the country results in significant impacts on farmers in terms of
• reduced productivity, restrictions on trade
• testing costsand
• levies on production
• Social and health impacts relating to financial and reputational strain

In addition, the existence of the disease involves considerable public expenditure on disease eradication measures, thereby imposing a heavy burden on the Irish taxpayer. The implementation of the programme has conferred considerable benefits on Irish farmers and has significantly reduced the cost to the Irish exchequer. The improvement in the disease situation has considerably reduced the financial burden arising from these losses/costs to farmers and the Exchequer. A value for money review of the programme which was completed in 2008 concluded that the public expenditure on the programme has enabled the Irish Livestock industry to maintain and develop exports markets for cattle and beef. In addition, it found that the net impact of the Programme has been to facilitate the growth of the Irish cattle industry by creating and enhancing export opportunities and by improving the productivity of cattle rearing. The export trade in beef, worth on average €2.4 billion per annum is dependent on the effective implementation of the eradication programme. The benefit of improved market access accrues to the farmer producer and to the processing sector in the first instance, while the benefits of improved animal productivity and public health accrue primarily to the farmer producer. Recently opened third country markets would not have been accessed were it not for the robust nature of the TB scheme in relation to the traceability of bovines, the tracing of disease, the sophistication of the IT support systems and the sensitivity of the testing through usage of potency tested tuberculin and supplementary interferon-Y testing. Society at large also benefits from the Programme's impacts in these three areas to the extent that the improved economic performance of the farming industry spills over into the wider economy and to the extent that the Programme contributes to enhanced public health. In addition, any improvement in the disease situation will reduce the burden on the national exchequer and,

accordingly, the taxpayer.

7. Targets

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

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

7.1.1 Targets on diagnostic tests for year : **2021**

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
Ireland	tuberculin test	Bovines	skin test	Programme Implementation	6 900 000	X
Ireland	tuberculin test (only purchase of tuberculin	Bovines	skin test	Programme Implementation	2 000 000	X
Ireland	bacteriological test	Bovines	culture	Programme Implementation	3 500	X
Ireland	gamma-interferon test	Bovines	blood	Programme Implementation	80 000	X
				Total	8 983 500	
				Add a new row		

	Total number of tests
Total number of tests	8 983 500
tuberculin test	6 900 000
tuberculin test (only purchase of tuberculin)	2 000 000
gamma-interferon test	80 000
bacteriological test	3 500
PCR	0

7.1.1 Targets on diagnostic tests for year : **2022**

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
Ireland	tuberculin test	Bovines	skin test	Programme Implementation	6 900 000	X
Ireland	tuberculin test (only purchase of tuberculin	Bovines	skin test	Programme Implementation	2 000 000	X
Ireland	gamma-interferon test	Bovines	blood	Programme Implementation	80 000	X
Ireland	bacteriological test	Bovines	culture	Programme Implementation	3 500	X
				Total	8 983 500	
				Add a new row		

	Total number of tests
Total number of tests	8 983 500
tuberculin test	6 900 000
tuberculin test (only purchase of tuberculin)	2 000 000
gamma-interferon test	80 000
bacteriological test	3 500
PCR	0

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on the testing of herds for year : **2021**

									Target indicators			
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
Ireland	Bovines	112 000	112 000	110 000	4 752	4 312	30	0,631	98,214	4,320	3,920	X

Total		112 000	112 000	110 000	4 752	4 312	30	0,631	98,214	4,320	3,920
									Add a new row		

7.1.2.1 *Targets on the testing of herds for year :* **2022**

									Target indicators			
Region	Animal species	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
Ireland	Bovines	112 000	112 000	110 000	4 246	3 806	30	0,707	98,214	3,860	3,460	X
Total		112 000	112 000	110 000	4 246	3 806	30	0,707	98,214	3,860	3,460	
									Add a new row			

7.1.2.2 *Targets on the testing of animals for year :* **2021**

							Slaughtering		Target indicators		
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)	

	Bovine	7 300 000	7 300 000	7 000 000	7 000 000	22 000	22 000	23 000	95,890	0,314	X
Total		7 300 000	7 300 000	7 000 000	7 000 000	22 000	22 000	23 000	95,890	0,314	
								Add a new row			
							Total number of animals expected to be slaughtered or culled : BOVINES	23 000			
							Total number of animals expected to be slaughtered or culled : BUFFALO	0			

7.1.2.2 Targets on the testing of animals for year : **2022**

							Slaughtering		Target indicators		
Region	Species	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)	
	Bovine	7 300 000	7 300 000	7 000 000	7 000 000	19 250	19 250	20 250	95,890	0,275	X
Total		7 300 000	7 300 000	7 000 000	7 000 000	19 250	19 250	20 250	95,890	0,275	
								Add a new row			
							Total number of animals expected to be slaughtered or culled : BOVINES	20 250			
							Total number of animals expected to be slaughtered or culled : BUFFALO	0			

7 .2 Targets on qualification of herds and animals

7.2 Targets on qualification of herds and animals for year : 2021

				Targets on the status of herds and animals under the programme												
						Expected not free or not free from disease										
		Total number of herds and animals under the programme		Expected unknown		Last check positive		Last check negative		Expected free or officialy free from disease status suspended		Expected free from disease		Expected officially free from disease		
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
	Bovines	112 000	7 300 000	0	0	2 392	388 194	1 134	166 087	167	25 271	0	0	108 307	6 720 448	X
Total		112 000	7 300 000	0	0	2 392	388 194	1 134	166 087	167	25 271	0	0	108 307	6 720 448	
												Add a new row				

7.2 Targets on qualification of herds and animals for year : 2022

				Targets on the status of herds and animals under the programme												
						Expected not free or not free from disease										
		Total number of herds and animals under the programme		Expected unknown		Last check positive		Last check negative		Expected free or officialy free from disease status suspended		Expected free from disease		Expected officially free from disease		
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
	Bovines	112 000	7 300 000	0	0	2 111	342 659	1 001	146 605	147	22 307	0	0	108 741	6 788 429	X
Total		112 000	7 300 000	0	0	2 111	342 659	1 001	146 605	147	22 307	0	0	108 741	6 788 429	

												Add a new row	

7.3 Targets on vaccination or treatment

7.3.2 Targets on vaccination or treatment of wildlife for year : 2021

		Targets on vaccination or treatment programme			
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered	
Ireland	19 100	5 000	1	5 000	X
Total				5 000	
			Add a new row		

7.3.2 Targets on vaccination or treatment of wildlife for year : 2022

		Targets on vaccination or treatment programme			
Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered	
	20 000	5 500	1	5 500	X
Total				5 500	

Standard requirements for the submission of programme for eradication, control and monitoring

			Add a new row	

8. Detailed analysis of the cost of the programme

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

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

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

Costs of the planned activities for year : 2021

1. Sampling

Cost related to	Specification	Number of samples	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR

2. Testing

Cost related to	Specification	Number of tests	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR
Testing	Tuberculin test	6 900 000	9.51	65,619,000	yes	16	10 499 040
Testing	Tuberculin test (material only)	2 000 000	0.09	180,000	yes	16	28 800
Testing	Gamma-Interferon test	80 000	5.82	465,600	yes	16	74 496
Testing	Bacteriological test	3 500	37.63	131,705	yes	16	21 072,8
Testing	PCR	0	14.77	0		16	0

3. Vaccines

Cost related to	Specification	Number of vaccine dosis	Average cost per dose in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
4. Compensation paid to owners								
Cost related to	Compensation of	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Compensation	Slaughtered/culled with salvage value excluded | Bovines	23 000	750	17,250,000	yes	16	2 760 000	
Compensation	Slaughtering/culling with salvage value | Buffalo	0		0	yes	16	0	
Compensation	Value of destroyed milk			0		16	0	
5.Cleaning and disinfection								
Cost related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Cleaning and disinfection	Cleaning and disinfection in case of full holding depopulation			0		16	0	
6. Slaughtering/culling costs								
Cost related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Slaughtering/culling	Slaughtering/culling costs - full holding depopulation			0		16	0	
7.Other costs								
Cost related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	

				0			0	X
Duly justified measures	Vaccine doses used for wild animals	5 000	0.95	4750	yes	16	760	X
				Add a new row				
				Total with Union funding request (€):	83,651,055	including	13,384,168.8	
				Total without Union funding request (€):	0		= requested EU contribution in €	

Costs of the planned activities for year : **2022**

1. Sampling

Cost related to	Specification	Number of samples	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	

2. Testing

Cost related to	Specification	Number of tests	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Testing	Tuberculin test	6 900 000	9.51	65,619,000	yes	16	10 499 040	
Testing	Tuberculin test (material only)	2 000 000	0.09	180,000	yes	16	28 800	
Testing	Gamma-Interferon test	80 000	5.82	465,600	yes	16	74 496	
Testing	Bacteriological test	3 500	37.63	131,705	yes	16	21 072,8	
Testing	PCR	0	14.77	0		16	0	

3. Vaccines

Cost related to	Specification	Number of vaccine dosis	Average cost per dose in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
4. Compensation paid to owners								
Cost related to	Compensation of	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Compensation	Slaughtered/culled with salvage value excluded | Bovines	20 250	750	15,187,500	yes	16	2 430 000	
Compensation	Slaughtering/culling with salvage value | Buffalo	0		0		16	0	
Compensation	Value of destroyed milk			0		16	0	
5.Cleaning and disinfection								
Cost related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Cleaning and disinfection	Cleaning and disinfection in case of full holding depopulation			0		16	0	
6. Slaughtering/culling costs								
Cost related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	
Slaughtering/culling	Slaughtering/culling costs - full holding depopulation			0		16	0	
7.Other costs								
Cost related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancing rate	Requested Union contribution in EUR	

				0			0	X
Duly justified measures	Vaccine doses used for wild animals	5 500	0.95	5225	yes	16	836	X
				Add a new row				
				Total with Union funding request (€):	81,589,030	including	13,054,244.8	
				Total without Union funding request (€):	0		= requested EU contribution in €	

8.2. Financial informaton

1. Identification of the implementing entities - financial circuits/flows

Identify and describe the entities which will be in charge of implementing the eligible measures planned in this programme which costs will constitute the reimbursement/payment claim to the EU. Describe the financial flows/circuits followed.
Each of the following paragraphs (from a to e) shall be filled out if EU cofinancing is requested for the related measure.

a) Implementing entities - **sampling**: who performs the official sampling? Who pays?
(e.g. authorised private vets perform the sampling and are paid by the regional veterinary services (state budget); sampling equipment is provided by the private laboratory testing the samples which includes the price in the invoice which is paid by the local state veterinary services (state budget))

(max. 32000 chars) :

Staff from DAFM sample for the interferon-y-assay. Kits for the sampling are procured by DAFM and provided to the DAFM Laboratories in Cork and Sligo and to University College Dublin. Bacteriological samples are taken by DAFM personnel in slaughter plants and are sent to the CVRL (a state laboratory) for analysis. These costs are borne by DAFM.

b) Implementing entities - **testing**: who performs the testing of the official samples? Who pays?
(e.g. regional public laboratories perform the testing of official samples and costs related to this testing are entirely paid by the state budget)

(max. 32000 chars) :

The bulk of SICTT testing is carried out by PVPs and is paid for by farmers. Some tests are also conducted by veterinary inspectors directly employed by DAFM while other tests are conducted by Wholetime Temporary Veterinary Inspectors (WTVIs) contracted by DAFM solely to carry out TB testing. In principle, Farmers pay for one test per annum and DAFM pays for all other tests, usually in the context of herds that experience a TB breakdown. The testing arrangements are referred to generally as "Department pay" and "Farmer pay". The veterinary practitioners employed by DAFM are salaried officials while the WTVIs are paid a fee per test. DAFM supplies and pays for all of the tuberculin used in the testing programme. DAFM sources the protein purified derivative (PPD) required for the performance of the TB test through a process of competitive tendering. The current supplier is Thermo Fisher Scientific. Testing of the interferon-y-assay samples is carried out by DAFM laboratories in Cork and Sligo and by UCD and paid for by DAFM. The CVRL (a state laboratory) carries out the bacteriological testing, the cost of which is borne by DAFM.

c) Implementing entities - **compensation**: who performs the compensation? Who pays?
(e.g. compensation is paid by the central level of the state veterinary services,
or compensation is paid by an insurance fund fed by compulsory farmers contribution)

(max. 32000 chars) :

Compensation under the On Farm Market Valuation Scheme is paid to farmers who suffer a TB breakdown unless they fail to comply with the rules governing the programme, with identification regulations and other national/EU legislative requirements and controls relating to bovine animals. This

scheme is designed to compensate herdowners for the loss of animals removed under the eradication programme and compensation is based on the market value of animals which is the equivalent price which might reasonably be obtained for the animal at the time of determination of compensation, from a purchaser in an open market, if the animal were not affected by TB, subject to certain limits applying. The compensation, which is paid by DAFM to the farmer, is based on the difference between (i) the value attributed to the animal on the farm under the On Farm Market Valuation Scheme and (ii) the salvage paid by the slaughter plant to the farmer for the reactor. Payments are processed and checked by DAFM's Regional Veterinary Office staff. Co-ordination and compilation of the claim for EU co-financing is undertaken by ERAD Division. Animals are valued on the farm by independent valuers included on DAFM's approved valuer list. Valuers are monitored by DAFM staff. Current market prices are monitored by DAFM also and are supplied to the valuers. DAFM pays the valuers a fee per valuation.

d) Implementing entities - **vaccination**: who provides the vaccine and who performs the vaccination? Who pays the vaccine? Who pays the vaccinator?

(e.g. farmers buy their vaccine to the private vets, send the paid invoices to the local state veterinary services which reimburse the farmers of the full amount and the vaccinator is paid by the regional state veterinary services)

(max. 32000 chars) :

N/A

e) Implementing entities - **other essential measures**: who implements this measure? Who provide the equipment/ service? Who pays?

(max. 32000 chars) :

DAFM provides the vaccine for the badgers and pays the persons engaged in vaccination of the badgers. DAFM pays for the restraints used in the trapping of badgers. It also pays the private operatives (the FRS) involved in the trapping of the badgers for both shooting and vaccination. DAFM officials are involved in the supervision of the badger removal and badger vaccination programme. DAFM also pays for the transport of the badger carcases to the laboratory and for the laboratory tests carried out on the badgers.

2 Co-financing rate (see provisions of applicable Work Programme)

The maximum co-financing rate is in general fixed at 50%. However based on provisions of Article 5.2 and 5.3 of the Regulation (EU) No 652/2014, we request that the co-financing rate for the reimbursement of the eligible costs would be increased:

☐ Up to 75% for the measures detailed below

☐ Up to 100% for the measures detailed below

3. Source of funding of eligible measures

All eligible measures for which cofinancing is requested and reimbursement will be claimed are financed by public funds.

☒ *yes*

☐ *no*

4. Additional measures in exceptional and justified cases

In the "*Guidelines for the Union co-funded veterinary programmes*", it is indicated that in exceptional and duly justified cases, additional necessary measures can be proposed by the Member States in their application.

Standard requirements for the submission of programme for eradication, control and monitoring

If you introduced these type of measures in this programme, for each of them, please provide detailed technical justification and also justification of their cost:

In view of the significant contribution of the badger culling programme to the reduction in the incidence of bTB in Ireland and the likely contribution of vaccination of badgers in the future, we believe that the costs associated with vaccination (both the cost of the vaccine and the cost of distribution/ administration) and badger culling should be co-funded, as recommended by the Court of Auditors report (2015). Accordingly Ireland is applying under this programme for co-funding in respect of the costs relating to vaccination, which are eligible for co-funding under Article 11(e) of Regulation 652/2014 , and for badger culling under Article 11(h) 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.

Standard requirements for the submission of programme for eradication, control and monitoring

Attachments

IMPORTANT :

1) The more files you attach, the longer it takes to upload them .
2) This attachment files should have one of the format listed here : jpg, jpeg, tiff, tif, xls, xlsx, doc, docx, ppt, pptx, bmp, pna, pdf.
3) The total file size of the attached files should not exceed 2 500Kb (+- 2.5 Mb). You will receive a message while attaching when you try to load too much.
4) IT CAN TAKE ***SEVERAL MINUTES TO UPLOAD*** *ALL THE ATTACHED FILES. Don't interrupt the uploading by closing the pdf and wait until you have received a Submission Number!*
5) Only use letters from a-z and numbers from 1-10 in the attachment names, otherwise the submission of the data will not work.

List of all attachments

		Attachment name	File will be saved as (only a-z and 0-9 and -_) :	File size
		17175_12263.docx	17175_12263.doc	15 kb
		17175_12264.docx	17175_12264.doc	368 kb
		17175_12265.docx	17175_12265.doc	1281 kb
		17175_12266.docx	17175_12266.doc	186 kb
		17175_12267.docx	17175_12267.doc	28 kb
		17175_12268.docx	17175_12268.doc	33 kb
			Total size of attachments :	1911 kb