



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 for eradication, control and surveillance of animal diseases and zoonosis 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).

If encountering difficulties:

- concerning the information requested, please contact HADEA-VET-PROG@ec.europa.eu.
- on the technical point of view, please contact SANTE-BI@ec.europa.eu, include in your message a printscreen of the complete window where the problem appears and the version of this pdf:

Protection of Your Personal Data:

For consultation about the processing and the protection of your personal data, please click to follow this link

[Privacy Statement](#)

Instructions to complete the form:

- 1) You can attach documents (.docx, .xlsx, .pdf, etc) to complete your report.
Using the button "Add attachments" on the last page of the form.
- 2) Before submitting this form, please use the button "Verify form"(bottom right of each page).
If needed, complete your pdf document as indicated.
- 3) When you have finished completing this pdf document, save it on your computer.
- 4) Verify that your internet connection is active and then click on the "Submit notification" button and your pdf document will be sent to our server. A submission number will appear on your document.
Save this completed document on your computer for your record.
- 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: 2022 1.0

Member state : PORTUGAL

Disease : Bovine Brucellosis

Species : Bovines

This program is multi annual :

Request of the Union co-financing from beginning of:

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

1. Contact data

Name	Phone
Email	Your job type within the CA :

Submission Date

30/11/2022 14:38:30

Submission Number

1669819112010-18935



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

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) :

Portugal has been implementing the co-financed bovine brucellosis eradication programme (BBEP) since 1991, and herds covered by the programme have a health status attributed in accordance with Council Directive 64/432/EEC of 26 June, its amendments, and the national legislation.

In the Continental area, all districts of Algarve Region, the districts of Aveiro, Viseu, Guarda, Coimbra, Leiria, Castelo Branco of the Centro Region and some councils of four of these districts that are part of two other Regions, namely the Norte and the Lisboa e Vale do Tejo have the disease-free status from infection with *Brucella abortus*, *B. melitensis* and *B. suis* in bovine animal populations, according to Annex I, in Part I, Chapter 1 of Implementing Regulation (EU) 2021/620 amended by the Commission Implementing Regulation (EU) 2021/1008 of 21 June 2021.

In the Autonomous Region of Açores, the Islands of Corvo, Faial, Flores, Graciosa, Pico, São Jorge, Santa Maria and Terceira have also disease-free status from infection with *Brucella abortus*, *B. melitensis* and *B. suis* in bovine animal populations, according to Annex I, in Part I, Chapter 1 of Implementing Regulation (EU) 2021/620 amended by the Commission Implementing Regulation (EU) 2021/1008 of 21 June 2021.

The eradication programme for *Brucella abortus*, *B. melitensis* and *B. suis* in bovine animal populations is advancing in a pre-eradication phase (attached graphics and tables) in the Annex at the last page of this form.

The eradication programme BBEP for the non-disease-free Regions of Portugal (3 Regions of the mainland and S. Miguel Island of the Autonomous Region of Açores) resulted with the following indicators, along the last 5 years, from 2017 to 2021 (from 2020 does not include Centro Region):

Herd apparent prevalence:

- 0.20%, 0.17%, 0.14%, 0.13%; 0.13%.

Herd incidence:

- 0.18%, 0.14%, 0.11%, 0.11%, 0.11%.

Animal prevalence:

- 0.042%, 0.03%, 0.05%, 0.02%, 0.02%.

Mainland:

Timeline from 2017 to 2021 (as mentioned above, from 2020 it does not include Centro Region):

Herd apparent prevalence:

- 0.17%, 0.17%, 0.12%, 0.145%, 0.119% (all Regions were below 0.3%).

Herd incidence:

- 0.15%, 0.13%, 0.10%, 0.123%, 0.10%.

Animal prevalence:

- 0.047%, 0.036%, 0.057%, 0.03%, 0.27%.

Comparing data from 2020 and 2021 and because Centro Region indicators were no longer considered since 2020:

- Herd apparent prevalence decreased from 0.145% to 0.119%.

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

- Herd incidence decreased to 0.12% to 0.10%.
- Percentage of positive animals decreased from 0.03% to 0.27%.

The variation of herd apparent prevalence by region, from 2020 to 2021, was the following:

- Norte – from 0.11% to 0.05%.
- LVT – 0,0% to 0.17% (due to 2 positive herds).
- Alentejo – maintained 0,28%.

According to the Directorate-General of Health (DGS), 11 human cases of brucellosis were notified in 2021 (provisional data) and were distributed by the following districts (SINAVE database):

- Aveiro and Lisboa - 1 case in each district.
- Évora, Faro and Setúbal - 2 cases each.
- Santarém - 3 cases.

In 2021, there were 21 positive and 18 new positive establishments. By the end of 2021 there were 1 county with 2 infected herds in the Norte region, 1 county with 1 infected herd in the Alentejo region (the maps comparing 2020 to 2021 are in the attached file).

Positive animals were subjected to sanitary slaughter and those coming from newly infected herds were subjected to organ collection for bacteriology. A total of 327 animals were slaughtered and 44 animals were sampled. From these, 14 had *Brucella* isolation (8 isolates were from the Norte region, 1 from Lisboa e Vale do Tejo region and 5 was from Alentejo region).

Compulsory pre-movement testing for national movements has been applied to avoid the entrance of infected bovine in disease-free establishments, with the following data registered in 2021 for the mainland: 7.037 establishments/68.528 TPM.

Vaccination was considered as useful tool for brucellosis control as it increases herd immunity and decreases environmental contamination.

Data on vaccination history covering the past 5 years is in then Annex attached to this form. It has been applied at Norte Region (to be stopped by the end of 2022), Alentejo Region (stopped by the end of 2021) and at S. Miguel Island (stopped by the end of 2019).

The BBEP foresees the investigation of positive and infected establishments to access the origin of infection. For this evaluation a specific data collection questionnaire is used (epidemiological enquiry – “EI”). These EI is implemented with the objective to establish possible links to other farms (trace-back and trace-forward) and characterize possible risk factors and sources of infection. There were 10 epidemiological inquiries in newly infected establishments in the mainland. The main probable reasons for the infection were related to direct contact with other ruminants, introduction of animals and other origins.

Brucellosis treatment is strictly forbidden and brucellosis vaccines are only purchase and distributed by DGAV. Two cases of abortions were detected in bovine animals in the Norte Region and were related to one herd with RB51 vaccination. Only one foetus from this herd was sent to the NRL for bacteriological diagnosis with the isolation of *Brucella abortus* strain RB51. No bovine abortions were reported in Alentejo or LVT

Autonomous Region of Açores (S. Miguel Island):

The herd apparent prevalence and the herd incidence of BBEP implemented in 2021 increased from

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

0.085% in 2020 to 0.216 % in 2021.

The percentage of positive animals also increased from 0.001% to 0.004%, with no *Brucella* isolation. Although, it is referred only to 3 positive animals, slaughtered and negative in bacteriological test. The last isolation of *B. abortus* in S. Miguel Island was in October 2014.

The percentage of free (B3) and officially free (B4) herds was 100% (no suspended status).

Timeline from 2017 to 2021 was as follows:

Herd apparent prevalence and herd incidence (same data):

- 0.47%, 0.15%, 0.25%, 0.04%, 0.22%.

Animal prevalence:

- 0.011%, 0.003%, 0.007%, 0.001%, 0.004%.

There were 3 epidemiological inquiries all due to other infections.

There were 8 notified bovine abortions in S. Miguel Island, all negative to brucella.

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) :

Requirements for eradication programme bades on granting disease-free status at the level of establishments are in accordance with Commission Delegated Regulation (EU) 2020/689 of 17th December 2019.

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

Sampling scheme:

All non-castrated bovines over 12 months of age are tested in all herds from the non-indemne areas of Continental Portugal and non-indemne areas of the Autonomous Region of Açores.

Diagnostic methods used:

The official diagnostic tests are the serological Rose Bengal test (RBT), as screening test, and the Complement Fixation Test (CFT), as confirmatory test, when serial diagnostic is applied. ELISA test for milk samples is used as a diagnostic test in dairy establishments, for the purposes of maintaining B3 and B4 health status.

ELISA tests for blood samples may be used as a complementary diagnostic test for the investigation of false positive serological reaction in specific geographical areas.

Bacteriology is an important tool to confirm infection.

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

Methodology related to diagnostic tests use are presented in detail in point 4.4.6.

- (i) for the granting of the disease-free status to establishment and the maintenance of that status.

Establishment with B4 health status

The disease-free status from infection with *Brucella abortus*, *B. melitensis* and *B. suis* without vaccination (B4) may only be granted to an establishment keeping bovine animals that complies with Section 1, Chapter 1, Part I, Annex IV of Delegated Regulation (EU) 2020/689.

- In the past 12 months there has been no confirmed case of infection in bovine kept in the establishment.
- In the past 3 years none of the animals in the establishment has been vaccinated against the infection.
- If the entire animals over 12 months of age present in the establishment at the time of blood sampling have tested negative to:
 - 2 serological tests with 6 months interval for establishments classifying for the first time:
 - 3 serological tests with at least 30, 60 and 180 days interval, for establishments that had infected animals, after the removal of the last positive/confirmed case.
- Animals showing clinical signs consistent with infection, such as abortions, have been subjected to investigations with negative results.
- Since the beginning of the first sampling referred above, all bovine animals and all germinal products of bovine origin introduced into the establishment must have been originated from B3 or B4 establishments and must have come from a free Member State (MS) or free Region and entire bovine animals over 12 months of age that have been tested negative in a PreMT or PosMT.
- The B4 status may be granted to an B3 establishment if requirements for granting the status are fulfilled and if all animals have not been vaccinated during the past 3 years and entire bovine animals over 12 months of age are serologically tested with negative results at appropriate intervals of not more than 12 months.

The status (B4) may only be maintained if the requirements set for granting continue to be fulfilled and serological testing is carried out with negative results on samples taken from all entire animals over 12 months of age at appropriate intervals of not more than 12 months or are entire animals over 12 months of age kept in establishment located in a Member State or a Region free from infection (always considering the type of production and the identified risk factors).

When serological testing is performed by executing Milk Elisa tests on samples from the lactating cows, it is required simultaneously testing blood samples from the remaining animals over 12 months of age.

Establishment with B3 health status

The disease-free status from infection, with vaccination (B3), may be granted when the establishment fulfils the requirement for B4 status but has bovine animals vaccinated against brucellosis less than 3 years ago.

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

A suspected case occurs in the following occasions:

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

- If one bovine animal from a B3 or B4 establishment is positive to a serological test (is positive to RBT and has CFT \geq 20 IU/ml).
- A notified abortion storm;
- If an Epidemiological Inquiry reveals the possibility of infection by contact with an infected holding.
- When there are no conditions for the establishment to be classified as B3 or B4 (whenever the plan is not being fulfilled).
- For any other reason considered relevant to the strategy against brucellosis by the veterinary services.

Whenever there is a suspected case of the disease and until it's confirmation or rule out, the DSAVR conduct the following actions:

- Suspension of status (B3S/B4S); the maximum period of time that disease-free status may be suspended in the routine testing is 365 days.
- Prohibition of movement of germinal products of bovine and and bovine animals from and out of the establishment, unless the animals are for immediate slaughter in a designated slaughterhouse;
- Operators are also notified to isolate the suspected cases, where technically possible.
- Epidemiological enquiry (EI).
- In the case that the pattern of positive results in B3 and B4 establishment are not compatible with infection (single reactors, low CFT titres, etc) and EI do not indicate any risk, DSAVR may decide on the investigation of possible false positive serological reaction.
- The DSAVR may decide not to suspend the disease-free status of the whole establishment when there are different epidemiological units.
- The DSAVR may extended measures to additional susceptible species kept in the establishment and to any establishment with epidemiological link with the establishment where the suspected case occurred.

Regarding the serological positive animals, DSAVR sets the following standard procedures, unless false positive reactions protocol is initiated:

- serological positive animals are marked and are compulsory sent to slaughter under official supervision within 30 days following the date of official notification of the operator.
- collection of material for laboratory diagnosis.
- preparation of a dossier for the payment of compensation.
- the remaining animals are submitted to serological test 30 days following the removal of the last positive animal for slaughter.

The B3 or B4 status may only be restored if the requirements set out for the granting and maintenance for this status are fulfilled and the results of further investigations substantiate absence of infection, and the status of all suspected cases has been determined.

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

An establishment is infected, if the presence of *Brucella abortus*, *Brucella melitensis* and *Brucella suis* is confirmed, by its isolation in a bacteriological examination of samples taken from sanitary slaughter or from other origin.

DSAVR shall applied measures to the infected establishment, if they were not yet implemented, namely:

- Withdrawn of status to infected (B.2.1). The withdrawal may be limited to the epidemiological unit where the case was confirmed.

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

- Prohibit movement of germinal products of bovine origin and of bovine animals from and out of the establishment, unless the animals are for immediate slaughter in a designated slaughterhouse (sanitary sequestration);
- Isolate the suspected cases, where technically possible;
- Sanitary slaughter of infected animals, with compensation;
- Conduct investigations and the epidemiological enquiry (EI), as mentioned to the suspicious case.

The B3/B4 status may only be regained if all confirmed cases and all animals that have tested non-negative have been removed and the remaining animals fulfil the requirements set out for the granting of status, according the Delegated Regulation (EU) 2020/689, Annex IV, Part I, Chapter 1 and 2, Section 4.

(Please see point 4.4.9, as regard more measures)

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

The notification to the operator related to sanitary sequestration, forbiddens entries and exits (except to slaughter) of animals and contains instructions related to cleaning and disinfection of the stables and outbuildings areas and loading points, of the materials or substances from animals or been in contact with them, as well as containers, utensils and other objects used by animals.

During the EI, operators are faced with a range of questions related to biosecurity measures and management which have also informative and educational purposes. Subjects as management of pregnant animals, use of pastures, risk on sharing equipment, and the scope for direct or indirect contact with other epidemiological units are referred.

(e) measures to be implemented as regards additional animal populations, if relevant;

From 2023 the "Sanitary surveillance programme in hunting game species" already implemented at national level will include serology for Brucella in cervids and wild boars.

We already know about the endemic circulation of B. suis biovar 2 in the wild boars population which constitute a risk in the extensive production systems of ruminants. Also a set of biosecurity measure are being discussed with the livestock producers and the hunters representatives to improve biosecurity.

(f) derogations to be applied in accordance with Article 19 of Delegated Regulation (EU) 2020/689, if relevant.

Not relevant.

(g) coordinated measures with other Member States or third countries, if relevant.

Not relevant

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Duration of the programme : 2023 - 2023

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

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

Other, please specify

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 evolution of prevalence and incidence covering the past 5 years was already described in point 2 and is illustrated in the attached file.

We intend to submit the five districts for indemnity recognition in 2022.
DSAVR Norte and DSAVR Alentejo expected to be disease free in 2027.

The evolution of indicators in S. Miguel, at the Autonomous Region of Açores, suggests that brucellosis will be eradicated by 2024 as no isolation of *Brucella* has been obtained.

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 of infected establishments;*
- (b) the expected annual increase of the number of disease-free establishments;*
- (c) the expected vaccination coverage, where relevant. (max. 32000 chars) :*

Tables on the intermediate targets of the eradication programme are presented in the Annex in attachment.

For the interim targets, we did not consider the number of establishments with at least one positive animals (24 in 2021) but the number of establishments with isolation of *Brucella* (infected holdings). The expected evolution is the following:

- Year / Holdings with isolation of *Brucella* / % infected holding
 - 2021 / 9 / 0.05%
 - 2022 / 7 / 0.04%

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

- 2023 / 3 / 0.02%
- 2024 / 0 / 0%

Regarding the Autonomous Region of Açores, in S. Miguel Island, there was an interruption of vaccination at the end of 2019 that will allow to obtain the disease-free-status for this Region in 2024.

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) :

(a) the authorities in charge of coordinating and supervising the implementation of the programme:

The Directorate-General for Food and Veterinary (DGAV) is the authority responsible for the control and eradication of infection with *Brucella abortus*, *B. melitensis* and *B. suis* as regard kept bovine animals and its central service, the Directorate for Animal Protection (DSPA) is responsible for coordinating and monitoring the programme.

Three Regional Directorates for Food and Veterinary (DSAVR) of the mainland, decentralized services of DGAV (Norte, Lisboa e Vale do Tejo and Alentejo), are responsible for overseeing the implementation of the various activities under the eradication programme in their area, for the attribution of the health status for the establishment and the implementation of restrictions in positive establishment. DGAV/ DSAVR is also responsible for monitoring compliance with the legal requirements arising from the agreements signed with the OPPs.

At S. Miguel Island, the authority responsible for control and eradication of infection with *Brucella abortus*, *B. melitensis* and *B. suis* is the Regional Directorate of Agriculture, via the Directorate for Veterinary Services. The implementation of measures is co-ordinated on the island via a veterinarian who is a Head of Division or Head of the Veterinary Service Sector of the Agricultural Development Service of the Island, who will request cooperation from veterinarians from other bodies. The measures under the plan are implemented by technicians from the agricultural development services of the Island.

(b) responsibilities of all stakeholders involved:

Most field activities of this programme are implemented by private veterinarians from Livestock Producers Organisations (OPPs) which annually submit sanitary programmes to be approved by the official services. There is one veterinary co-ordinator per OPP. Each OPP is assisted by several veterinarians. OPP is responsible for the animal identification, vaccination, blood sampling, computerization of the data in the Animal health database (PISA.Net) and communication to the Regional veterinary services of all irregularities.

The entity that collects the samples is also responsible for submitting them to the laboratory. Sampling during sanitary slaughter is carried out by the official veterinary inspector of the DSAVR.

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

All laboratories involved in Brucellosis Eradication Programmes are accredited by Portuguese Accreditation Body, named IPAC.

The National Institute for Agrarian and Veterinary Research (Instituto Nacional de Investigação Agrária e Veterinária, I.P., hereinafter - INIAV I.P.) is the national reference laboratory (NRL) for food safety, animal, and plant health. INIAV I.P. is responsible for the coordination and technical supervision of the official laboratories and the harmonization of the testing methods used, following guidelines supplied by European Commission and OIE Manual. There are two delegations of INIAV performing official samples for brucellosis diagnosis. One is in the Norte (Vila do Conde - Vairão) and the other in Alentejo (Évora). These delegations perform Rose Bengal Test (RBT) and Complement Fixation Test (CFT). Brucella bacteriological examination and typing of Brucella are only performed at NRL at central level and the results are electronically communicated to DGAV.

In the continental territory, there are 6 private official laboratories authorized to carry out RBT and CFT and record the results in PISA.NET:

- SEGALAB (Laboratório de Sanidade Animal e Segurança Alimentar, S.A.) – Póvoa do Varzim - Porto.
- PROLEITE (Cooperativa Agrícola de Produtores de leite, C.R.L.) – Oliveira de Azeméis – Aveiro.
- LMV (Laboratório de Medicina Veterinária, Lda) – Santarém.
- SOCLAB (Polo Litoral Alentejano) – Santiago do Cacém – Setúbal.
- COPRAPEC (Cooperativa Agrícola de Compra e Venda de Montemor-o-Novo, C.R.L) – Montemor-o-Novo – Évora.
- ACOS (Associação de Agricultores do Sul) – Beja.

NRL provides technical training for staff either for initial qualification or for requalification on RBT and CFT techniques. NRL provides official Labs with Positive Control Serum for RBT and CFT techniques.

Operators and traders have the responsibility to provide access and the necessary means to carry out the interventions on the animals, to comply with the rules on identification and animal movement, to allow loading and transport for slaughter of positive animals and to comply with the movement restrictions and depopulation periods imposed, following total slaughter.

Operators have the right to be compensated for the value of their animal's compulsory slaughtered or culled if they fulfill their responsibilities under the applicable legislation.

At S. Miguel Island, the Official Services have protocols firmed with Farmers Associations and those private veterinarians perform the blood sampling, unless in positive herds, that is performed by Official Veterinarians.

Serological diagnostic testing, milk ELISA testing and bacteriological examinations for the isolation, identification and typing of Brucella are carried out in the LRVA - Regional Laboratory of the Autonomous Region of Açores.

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.

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

(max. 32000 chars) :

The eradication programme for *Brucella abortus*, *B. melitensis* and *B. suis* in bovine animal populations will be implemented at the following geographical and administrative areas of the continental territory:

- Directorate for Food and Veterinary of the Norte Region (DSAVRN) – districts of Viana de Castelo, Braga, Bragança, Porto, Vila Real.
- Directorate for Food and Veterinary of Lisboa e Vale do Tejo (DSAVRLVT): – districts of Santarém and Lisboa and parts of the districts of Leiria and parts of Setúbal.
- Directorate for Food and Veterinary of the Alentejo Region (DSAVRALT) – districts of Portalegre, Évora and Beja and parts of Setúbal.

Autonomous Region of Açores territory:

- Directorate of Veterinary Services of Autonomous Region of Açores (RAA) - Island of S. Miguel.

As regard the Autonomous Region of Madeira (not cofinanced by the EC):

- Directorate for Food and Veterinary Services of the Autonomous Region of Madeira (RAM) – Islands of Madeira and Porto Santo

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) :

Brucellosis is a notifiable disease since 1953 and listed in the annex of Decree Law No 39:209 of 1953 and its amendments. This obligation is reinforced by the Animal Health Law, Regulation (EU) 2016/ 429 and Implementing Regulation (EU) 2018/1882, where this disease is classified as “B” – compulsory eradication.

Disease treatment is strictly prohibited. The veterinarian is responsible for identifying risks and to inform DGAV.

Clarification:

There is no legal definition for “abortion storms” but as regard “abortions”, the following rules are defined (standardized) at article 2 (Definitions) and article 7 (Obligation to notify abortions) of national Decree law 244/2000:

«Article 2 (Definitions),:

Point 13): Herd with suspected brucellosis — a herd is considered suspect whenever there have been abortions or any other clinical signs that may lead to the suspicion of infection of *Brucella*.»

«Article 7 (Obligation to notify abortions):

Point 1 — The notification, by the animal keeper, of all abortions in females of the bovine, ovine and caprine species is mandatory.

Point 2 — Notified abortions must be the subject of an epidemiological inquiry and collection of material for bacteriological diagnosis.

Point 3 — The rules of procedure for collecting and sending material to laboratories from abortions will

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

be drawn up by the LNIV and disseminated by DGV circular, through the regional directorates of agriculture. »

In accordance with the above mentioned legislation, notification of abortions is compulsory and must give rise to an epidemiological investigation and the collection of material for bacteriological diagnosis. There are leaflets published at the website of DGAV and available to the regional veterinary services to animal keepers indicating the importance of this disease and the investigation of abortion. Due to the close contact of farmers and the veterinarians responsible for the control of disease at their herds, both are aware that the main signs related to this disease are related to abortions and retained placenta.

There are procedural rules for collecting and sending material from abortions to the laboratory, drawn up jointly by DGAV and the INIAV I.P., published on the website of both Institutions. INIAV I.P., as NRL, carries out bacteriological diagnostic or other tests and sends out the results to DGAV. An investigation is conducted on the unit of origin in response to positive results on testing for Brucella.

In 2023, a new procedure will be established for abortion material collection for brucellosis surveillance, establishing a network with NRL and private laboratories that receive abortion materials for the diagnosis of other abortion agents (Neopora, Chlamydothyla, etc.) which will collect samples to be sent to INIAV.

INIAV will also take the opportunity to carry out a study requested by the European Reference Laboratory, that consists of collecting of vaginal samples to compared different swabs females who may have aborted or given birth one or two weeks ago. PCR and bacteriology will be applied in those samples.

Health status of a herd is suspended following a positive result and the operator is notified for the quarantine and measures to be carried out, including the prohibition of movements (except for slaughter).

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) :

The eradicated programme covers all bovine animals.

Tables and maps on alineas a), b) and c) are in Annex attached to this form.

Alinea d) information as regards the epidemiological situation in additional animal populations:

- not relevant.

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

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) :

Measures for the identification, registration and movement of bovine are described in national Decree-Law n° 142/2006 of 27 July 2006 with its amendments, setting up the National System for the Identification and Registration of Animals (SNIRA), Commission Delegated Regulation (EU) 2019/2035 and Commission Implementing Regulation (EU) 2021/520.

The system for the identification and registration of bovine animals comprises the following elements:

a) Means of identification to identify each animal: two conventional eartag (electronic identification can also be used as an alternative, substituting one conventional eartag by an electronic ear tag or a ruminal bolus).

b) Individual bovine passport (BP) mandatory only for animals intended for intra-Community trade. The BP has the registration of the identity of the animal, the current holding, the holdings where the cattle went by and the health status of the establishment.

c) Movement documents.

d) A central national database (SNIRA) which monitors the issue of the movement documents according to the health status of the establishment concerned.

Each operator of animals must declare to the database the information concerning the origin, identification, and the destination of the animals which the operator has owned, kept, transported, marketed or slaughtered.

All animals are identified within 20 days of birth (for reasons related to the physiological development of the animals, that period may be extended up to 60 days following the birth of the animal, with the second mean of identification, namely the ruminal bolus), and, in any case, before the animal leaves the establishment on which it was born.

It is mandatory for each operator of animals to provide information to SNIRA within 7 days of the event.

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) :

All the herds covered by the programme have a health status in accordance with Regulation 2020/689. Health status is assigned or amended by the Regional official veterinary services (DSAVR).

The operators of establishment where bovine animals are kept, must comply with the general and disease specific requirements ordered by DGAV/DSAVR, to obtain and maintain the disease-free-status of their establishments.

The DSAVR may attribute distinct health status to different epidemiological units of the same establishment if there is information from its operator about:

- the different unit established within the establishment to be granted distinct health status prior to any suspicion or confirmation of the disease.
- accessible tracing of the movements of animals and germinal products of bovine origin, from and between the units.
- the unit has separated by physical, and management means and complies with any risk mitigating

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

measures requested by the DSAVR for that purpose.

Reproductive herds:

The existing health status as regard infection with *Brucella abortus*, *B. melitensis* and *B. suis* for establishments, are in accordance with the requirements of Annex IV, Chapter 1 of Delegated Regulation (EU) 2020/689, and are as follows:

- B4 - establishment with the disease-free status from infection, without vaccination.
- B3 - establishment with the disease-free status from infection, with vaccination.
- B4S - establishment with the suspended disease-free status from infection, without vaccination.
- B3S - establishment with the suspended disease-free status from infection, with vaccination.
- B2 - establishment with the disease-status not free from infection.

In complement, and for the purpose of management of the eradication programme:

- B2.1 - establishments infected (withdraw the disease-free status, when isolation of *Brucella abortus*, *B. melitensis* and *B. suis* is officially confirmed, post-mortem or other).

- B4/B3 brucellosis-free herds are those that fulfil the programme and in which the bovines over 12 months of age introduced in the holding were submitted to a serological survey in the previous 30 days with negative result (pre-movement test), according with the criteria set out in the legislation and specific guidelines on the subject - procedure for "Sanitary Classification".

- The disease-free herd status (B4/B3) is suspended (B4S/B3S) in the following situations:
 - a) If the serology reveals positive animal(s).
 - c) If an Epidemiological Inquire (EI) reveals the possibility of infection.
 - d) When the conditions to be considered disease-free status are not fulfilled by all animals in the herd.
 - e) For any other reason considered relevant to the strategy against brucellosis by the official veterinary services.

- After a positive result, animals are subjected to sanitary slaughter and sampled for bacteriological or histopathological confirmation. If all the animals over 12 months of age test negative test carried out 30 days after the slaughter of positive animals and the bacteriological and histopathological tests are negative, the suspension is withdrawn.

- The suspended disease-free status (B4S/B3S) becomes infected status B2.1 when the presence of *Brucella* is confirmed by isolation of the agent or positive histopathological result.

- Infected herds (B2.1) can become non-disease-free (B2) after 2 tests test with negative results on all bovines more than 6 months of age, carried out 30 after the slaughter of the last animal reacting positive and 60 days after this last testing.

Herds with disease-status not free (B2), undergoing health measures, reacquire disease-free status (B3/B4) after one negative test carried out 180 days after the previous one.

Fattening herds:

EB4T3L4 is the disease-free status assigned to fattening herds that receive animals from disease-free reproduction herds and other disease-free fattening herds with negative pre-movement tests. These herds can send animals to slaughter and to other fattening herds.

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

Maintenance of the classification regime includes:

- movements of animals to this establishments are carried out in compliance with the requirements of premovement tests set out in Delegated Regulation (EU) 2020/689 and holdings of origin are BB free.
- the animals kept in the units for more than 12 months will be tested.

Whenever there is a positivity in serology the EB4T3L4 status is withdrawn (ES) and whenever there is infection (presence of Brucella is confirmed by isolation of the agent or positive histopathological result) the status becomes infected E2.1.

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) :

Decree-Law N° 142/2006 of 27 July 2006 and its amendments, lays down measures for the monitoring of movements of bovine animals.

When cattle are transferred from one holding to another, or when they are sent for slaughter, they must be accompanied of the respective movement document (Declaration of Movements) currently issued from the SNIRA database according to health status of herds involved.

There is a web service between SNIRA and sanitary data base PISA.Net used to validate the movement. The kind of movement authorized, the document that is necessary, who can obtain it and the predictor conditions for each movement, were previously fixed and are part of the informatics system validation. The system is prepared to issue alerts that will help veterinary official services to perform control activities and to confirm the ownership of the animal.

The Declaration of Movement documents can therefore be obtained directly from the online system by the animal owner or at the information collection points located at the SVO or at Agricultural Confederations reception desks.

Despite the emission of the Declaration of Movement ensures the movement's registration on the SNIRA database, the owner of the holding of destination must notify the database of the entrance of the animal within the period of 7 days, and this procedure is mandatory to update the information in the system.

Movements are not permitted from establishment if health classification is "non-disease free" (B2.1, B2, B3S and B4S), except for seronegative animals destined for immediate slaughter. Positive animals are marked and set to sanitary slaughter.

Only animals from B3 and B4 establishment may be moved without restrictions. However, movements of vaccinated animals less than 3 years before the vaccination, from B3 to B4 establishment imply the change of classification of B4 into B3.

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

The updating of health status on PISA.Net is undertaken by the veterinary services and determines the authorization for movements using an interoperability procedure between SNIRA and PISA.Net.

The movements to pastures for a set period and the transhumance of bovine are permitted only when these animals come from establishment that are disease-free.

Such movement is subject to compliance with the rules set out by the veterinary services, as follows:

- Animals come only from establishment and areas that are not subject to any health restrictions;
- Bovine animals are identified in accordance with the legislation;
- Animals moved present no evident symptoms of infectious contagious disease;
- When movements are not daily but seasonal it needs to be registered in SNIRA;
- The entire herd shall be tested within 30 days of returning from seasonal staying in common pastures.

Animal movement of establishment under surveillance are always under official control and there are several controls in place, such as:

- o Data on field work is entered by OPP on a data base (PISA.Net), allowing DSAVR to control the compliance with the registered checking's and the number of animals present in the establishment;
- o Restricted establishments are blocked in the electronic database that issues movement permits, therefore animals are not authorized to move, except directly to slaughter;
- o Systematic trace back is carried out and contact establishment are serological investigated. Whenever contacts between establishment are regular, they are considered as the same epidemiological unit and all related units are subject to restrictions.

When OPPs visit establishment and check the number of animals, if any irregularities are detected the OPP informs the DSAVR, which initiates the respective official control and if necessary, the health-infringement procedures.

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) :

The serological tests used are Rose Bengal (RBT) and Complement fixation test (CFT) and the methodology to be applied depends on the health status of the establishment. Milk ELISA test is used as a diagnostic test in dairy establishments, for the purposes of maintaining B4 and B3 health status. Bacteriology is used to confirm infection. ELISA for blood samples is used as a complementary test when there are suspicions of non-brucellosis-related positive results.

The accreditation status of the laboratories performing the Brucellosis eradication programmes, is published in IPAC (Instituto Português de Acreditação) website and the approved listed laboratories authorized to carry out the tests are published in the DGAV website.

ELISA and bacteriology are only carried out at the NRL.

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

Annual testing is mandatory for all bovine over 12 months of age.

Tests used and sampling and testing schemes/ methodology to be applied depends on the health status of the establishment.

SEROLOGICAL TESTING

In line with the objective, serological diagnosis is part of:

- The surveillance activities for maintenance of the health status;
- The eradication measures and validation of absence of infection when applied following detection of a positive animal;
- To clarify risk situations, when applied in contact establishment following an epidemiological investigation;
- In pre-movement tests (PreMT) or post-movement tests (PosMT) for animals over 12 months of age; during the 30 days prior or after the introduction into an establishment, samples with negative results to RBT and CFT are required.

In B4 and B3 establishments, a bovine animal is positive if it has simultaneously positive results for RBT and CFT (CFT \geq 20 IU/ml), serial reading.

However, when there are more than 5% of animals reacting positively only to RBT, CFT is performed also to all RBT negative and, according to the results, those animals which are FCT positive are considered positive.

Also, in the holdings where one animal is positive to both RBT and CFT, all RBT negative animals are also tested with CFT.

In pre-movement tests for restocking RBT and CFT are used in parallel.

In non-disease-free establishments, a positive animal is one that has a positive result for RBT or CFT (parallel reading).

The serological testing of infected establishment (B2.1), until they achieve disease-free status B4 or B3, will be carried out in all animals over 12 months of age present in the establishment at the time of sampling. They must be negative to the following serological tests:

- a) First test negative carried out on all animals 30 days after slaughter of the positive/confirmed animal(s). All sera undergo to RBT and CFT.
- b) Second negative test will be carried out to all animals not earlier than 60 days later (=3 months after the removal of last confirmed case and the last animal that tested positive); If all the results of the serological test referred above are negative, the establishment will cease to be regarded as infected (B2.1) and will from then on be regarded as non-disease-free status (B2) undergoing rehabilitation.
- c) Third negative test will be carried out on all the animals not earlier than 6 months and not later than 12 months, following the date of above sampling.

If the infection with *Brucella suis* biovar 2 was confirmed in a single bovine animal, the B3/B4 status may be regained after negative testing obtained on the sampling carried out not earlier than 3 months later after the removal of the animal.)

If a false positive serological reaction is suspected in B4 or B3 herds (there is no clinical signs, the epidemiological investigation failed in establishing a probable source of infection and the CFT titres are low in few animals) the classification is suspended and the positive animals will be retested. All seropositive animals (RBT and CFT \geq 20 IU/ml) in the second test are slaughtered and subjected to

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

bacteriology. If in the second test the animal(s) is(are) negative the suspension is lifted and the establishment is not accounted as positive.

BACTERIOLOGY

A brucellosis “infected animal” is the one with bacteriological isolation.

An infected establishment is the one where *Brucella* was isolated, either through bacteriological examination of samples from positive animals or from abortions, milk, or other samples. An establishment can also be considered infected when the profile of serological tests results and the epidemiological evidence does not allow discarding the presence of brucellosis.

Bacteriology is therefore an important tool to confirm infection and is applied in serological positive animals detected in establishment where brucellosis was not yet confirmed (all non B2.1 establishment). Samples are collected from animals subjected to sanitary slaughter by official veterinarians and tests are performed only in the National Reference Laboratory (NRL). Isolation of *Brucella* is also followed by typing.

Material for bacteriological examination (limph nodes, organs, milk) is collected by sampling 10% of the animals sent for compulsory slaughter from each establishment with a minimum of 5 animals per unit. If more than 5 animals per holding are subjected to sanitary slaughter, 10% of animals with higher complement fixation titres, are selected to maximise probability of isolation by bacteriology. The Local Services (DAV) send the ID of animals to be sampled to the slaughterhouse inspector of DGAV. It is very rare to have more than 5 positive animals from the same holding to be slaughtered.

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) :

Bovine vaccinations will not be applied in 2023.

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) :

To prevent the disease from spreading between units a series of measures are taken with the aim of maintaining biosecurity standards. The notification to the operator related to sanitary sequestration, have a series of instructions explained in pont 3. c), namely those related to cleaning and disinfection of the establishment and outbuildings, areas and loading points of the materials or substances from animals or been in contact with them, as well as containers, utensils and other objects used by animals. These measures are referred also in the “Codes on good practices on farms” describing biosecurity measures and management, produced by agricultural associations in cooperation with the DGAV,

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

available in DGAV website.

During the epidemiological investigations information on the level of biosecurity is collected and the operator are asked a series of questions which, in assessing biosafety and management methods, clarify matters for farmers and are educational.

Structures must exist which permit effective isolation from the introduction of brucellosis into the establishment (e.g.: fences and/or walls, wheel dips, foot baths, appropriate footwear, and clothing, etc). These structures are compulsory under DL 81/2013 – the holding registration regime, for establishments with higher number of animals (REAP Classes 1-3).

It is also advised to comply with strict rules on entry and exit of animals on establishment with compliance with unit health status restrictions – Brucellosis status is verified automatically conditioning the issue of movement permits from the database.

Mixing of units in common pastures is also frequent in certain areas and a group of units can be considered as the same epidemiological unit in certain cases and have the same restrictive measures. Common pastures are registered in SNIRA and associated with the establishment marks using the pastures. Access to these areas is only for negative holdings.

A system is established for the verification of cleaning and disinfection by OPP or the official veterinarian, after the slaughter of positive animals or after total slaughter, prior to reintroduction of animals.

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) :

A positive animal in a disease-free establishment is seen as a suspected case and measures are taken as described in point 3. a) (ii) to confirm or rule out the disease in the event of a suspected case.

When the disease is confirmed, the actions taken are those described in point 3 b). The following measures will be taken by the DSAVR:

- Notifying the operator on the results obtained and the imposition of animal movement restrictions, prohibiting on moving of susceptible animals to and from the establishment.
- Compulsory slaughter of all animals that have tested non-negative, under the official supervision in a designated slaughterhouse and with appropriate compensation for their operators (owners).

Animals will be slaughtered no later than 30 days following the official notification of the operator.

- The use of depopulation (total slaughter) of outbreaks, when necessary (*).
- DSAVR enter data on slaughtered animals in PISA.Net and inform the veterinarian of the OPP to assist with the subsequent checks.
- The remaining bovine animals over 6 months of age present in the establishment at the time of

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

sampling must be tested with RBT and CFT (parallel testing) with negative results to the following serological tests, carried out after the slaughter of the positive animal(s): 30 days, 3 months. A third survey including animals with more than 12 months must be carried out at 6 months to 12 months interval, following the date of above sampling. These procedures are set out in a procedure for "Sanitary Classification".

(* The use of depopulation (total slaughter) of outbreaks may be determined by DGAV. Taken into consideration the financial restrictions, this strategy is analyzed on cost/benefit terms and this measure is taken based on the risk assessment of specific situations, according to the following criteria, set out in a procedure for total slaughter:

- When there is no improvement in the health status of an infected establishment /unit, in the last 12 months.
- When Brucella has been isolated.
- When, in certain epidemiological conditions of a geographical area, it is the most appropriate measure to improve the situation.
- When it is not possible to implement any other prophylactic animal health measure.

The proposal for depopulation, which is a sanitary decision performed by regional veterinary services (DSAVR), is always followed with two documents:

- The epidemiological inquiry (IE).
- An expressed commitment of the operator regarding its compliance with the "waiting period before restocking" and with the expressed conditions for restocking.

In the event of slaughter of the entire herd and the corresponding depopulation, holders are obliged to undertake the disinfection of the holding (initial and final) and the equipment, under a specific protocol. The procedures are supervised by the OPPs and validated by the DSAVR's. The costs of the total slaughter include slaughter, transportation from the holding to the slaughterhouse(s), considering the distance (value per Km), cost of the disposal of carcasses and the cleaning and disinfection of vehicles.

Operators are also notified of the following requirements:

- ensure that milk from positive animals may only be used by animals from the same holding after undergoing suitable heat treatment, in accordance with Regulation (EC) No 853/2004 of 29 April 2004.
- ensure that milk from negative animals is prevented from leaving the holding, except where it has undergone suitable heat treatment, in accordance with Regulation (EC) No 853/2004 of 29 April 2004.
- destroy by incineration or burial, after treatment with officially approved disinfectant solution, the straw, bedding and any other materials or substances that have been in contact with infected animals.
- foetuses, still-born animals, animals which have died from the disease after birth and placenta shall be collected and disposed of.
- prevent the use, without appropriate treatment, of manure from infected sheds or any other quarters used by the animals.
- the grazing areas where infected animals were kept may not be used within 120 days in winter or 60 days in summer, though it is recommended that the depopulation period should never be less than 120 days.
- cleaning and disinfection with officially approved disinfectants and other measures to prevent the spread of infection, of all parts of the establishments that may have been contaminated after the removal of the confirmed and suspected cases as well as cleaning and disinfection of all means of establishments.
- provide evidence of cleaning and disinfection, which is validated by OPP or the official veterinarian,

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

after the slaughter of positive animals or after total slaughter, prior to reintroduction of animals.

Operators are committed to perform cleaning and disinfection of establishment and equipments, in accordance with instructions of DSAVR after depopulation and before the entry of new animals. Pastures used by infected animals can not be used before for 120, or 60 days according to weather conditions (winter or summer respectively) however, it is advised that the waiting period should not be less than 120 days. These procedures are supervised by the OPP and validated by the DSAVR. The disease-free status will not be restored or grant again until it considers that this measure has been completed. There is an approved protocol for cleaning and disinfection.

OPP veterinarians are also involved in the epidemiological evaluation of the establishments/unit with the official veterinarians of DSAVR. Further detail regarding epidemiological investigations done in case of outbreak are described at the guidelines for the epidemiological inquiry.

The IE requires the characterization of the establishments/unit, the investigation of possible sources of infection including introduction of animals, contacts at pasture and possible contacts with wildlife. It also investigates all units that have contacts with the unit in question.

Non-compliances identified are subjected to penalties.

Following the epidemiological surveys carried out by the DSAVR, any establishments from which animals have been in contact (whether out in the pasture, during milking or under other circumstances) with animals from establishments in which brucellosis has been diagnosed will be treated as suspect and if necessary will undergo serological testing. A similar procedure must be followed in establishments in which abortions have occurred for unknown reasons, together with any symptoms that might lead to infection with brucellosis being suspected.

If the infection with *Brucella suis* biovar 2 was confirmed in a single bovine animal, the B4/B3 status may be regained after negative testing obtained on the sampling carried out not earlier than 3 months later after the removal of the animal.

4.4.10 Compensation scheme for owners of slaughtered and killed animals

(max. 32000 chars) :

The relevant compensation is paid to the breeder pursuant to Implementing Order N° 205/2000 of 5 April and joint Order N° 530/2000 of 16 May 2000.

The compensation payable is calculated as the sum of several indices according to their applicability to each case.

In cases of depopulation, the compensation paid relates not only to positive and reactor animals but to all exposed and cohabiting animals. Expenditure include slaughter, average cost per km travelled between the holding and the slaughterhouses, costs of destruction of carcasses, cleaning, and disinfection of vehicles.

In S. Miguel, the compensation for animals slaughtered is based in accordance with the provisions of regional legislation of the Regional Secretariat of Agriculture and Forests of the Regional Government,

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

published annually.

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:

Globally the activities of the programme are controlled as following:

- Regular controls: data on field work is entered by OPP on the national data base (PISA.Net) – DSAVR control the compliance with annual checking and suspend free status of herds and advise OPP when necessary.

The access profile and circuits of information are well defined allowing regular monitoring and standardization of information.

All laboratories that are involved in the brucellosis eradication programmes are designated and accredited.

- Positive/Infected herd's controls: repeated checking of positive/infected herds is monitored in what the compliance of intervals between testing after slaughter of positive animals. This is carried out in a continuous way, along the programme, whenever a status is suspended. Furthermore, movements control is carried out through SNIRA and observation of animals during the re-checks.
- Slaughter of positive animals: sanitary slaughter is directly organized by the official vet services which personally marks the animals and organize the schedule of transport to slaughterhouse.
- General movement control: the movement database issues movement permits in accordance with the information obtained through the webservice with sanitary data base (PISA.Net) based on the updated sanitary status of herds and the presence of valid pre-movement tests.
- Compliance with movement restrictions is assured through the blocking of permissions for issuing of movement permits in the electronic data base. In situ ID checks are regularly performed in 3% of herds comparing existing animals with SNIRA registries.
- Controls of cleaning and disinfection: these controls are routinely applied before restocking in case of total slaughter and following partial slaughter in infected farms. Specific recommendations are issued by the official veterinarians and OPP veterinarians make the verification of compliance with these requests. Lifting of restrictions is conditioned to this control of cleaning and disinfection. In Açores, instructions in this issue have been given by the Region Competent Authority to the veterinary services involved in the programme.

Non-compliances are subject to penalties.

In Açores the direction of Veterinary Services prepares quarterly technical reports of activities, which contains data on the Program Health of the Region, informing the various islands.

Half-yearly meetings are held with all Agrarian Development Services Island and submission of the report to the National Veterinary Authority simultaneously with the semi-annual and annual technical report.

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

SUPERVISION:

Supervision of OPP by DSAVR, are carried out in several phases:

1. OPP are controlled at the beginning of each annual programme, when the proposal is analysed to verify its compliance to the programmes and the inclusion of all eligible establishment.
2. OPP are controlled during the implementation of the programme through:
 - Monitoring the sanitary actions performed and its compliance to the programmes.
 - Monitoring the samples sent to the laboratories.
 - Monitoring the data inserted in PISA.Net database.
 - Official on-the-spot controls to a selected sample of OPP, including checks to their field work
3. OPP are controlled at the end of the year, with the final detailed verification and evaluation of the work carried out by each OPP which needs to justify all the cases where the planned activities have not been carried out, under the penalty being of non-payment of the subsidy.
4. OPP are controlled through measures that envisage compliance with the deadlines for re-inspection in establishment and identifying different degrees of non-compliance and/or improved performance.

Local veterinary services are supervised at central and regional level by monitoring of PISA.Net data and working meetings to evaluate the progress of the programme

The sampling scheme for this supervision is defined in the light of the available resources and is carried out with pre-defined targets, such as compliance with classification rules and with the deadlines for sanitary slaughter, while identifying areas for improvement.

The results of the controls carried out, are reported to the responsible units and entities and, if necessary, corrective measures are requested.

RECCOMENDATION OF AUDITS

A General follow-up audit was carried out to Portugal, ref. 2019-6580, from 25-29 March 2019 to review progress of several subjects/audits namely on the implementation of recommendation 3 (Rec3) of the FVO-Audit ref. 2016-8773 of 29 February 2016.

Rec 3 was based on conclusion No 109 and related finding No 79 of the audit report, namely «to ensure that the ELISA test is used on a sample of milk taken from the milk collected from a farm with at least 30% of dairy cows in milk, as required in Annex C) (2.2.3.4) to Directive 64/432/EEC». This recommendation was closed due to action taken.

Regarding this subject and mentioning the report of the audit, it was written as follow:

"DGAV informed that in Açores, an appointed service samples milk for testing with indirect ELISA. Sampling takes place quarterly to ensure that in the sum of samples from each farm is more than 30% of dairy cows in lactation period.

Beside ELISA test applied to cows in lactation the service collects blood samples from all cows present in the farm for a complementary screening test (serological test) under the programme. As a consequence, each cow is individually tested.

On the mainland the list of farms selected for testing with indirect ELISA test screening of brucellosis) is cross-checked with the data available in PCOL (the official milk control plan) on the farms supplying the dairy industry. This list is also cross-checked with the one presented in the sanitary programme of OPP.

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

Local veterinary services and OPP regularly exchange information concerning the farm status to avoid sampling at farms not complying with the sampling requirements. If OPP or official veterinarian identifies at least one of the following situations, the farm is excluded from the list:

- a) changes in the animals present in the farm,
- b) detection of non-compliance of the rules for the introduction of animals in the farm,
- c) presence of brucellosis outbreaks in the neighbouring farms,
- d) lack of conditions for the collection of milk samples in all the milk tanks of the farm, and
- e) difficulties in the individual identification of all the milk cows related with each milk container.

If the farm is excluded from the list, thus excluded from screening by ELISA, all animals at farms are subject to serological blood tests, and OPP reports to the Regional Veterinary Services the reason for the blood sampling methodology.

In the context of the 2019 GFA, DGAV confirmed that sampling procedure described above still is in place and followed, and sampling and testing applies quarterly to all eligible herds. It was also mentioned that in the first quarter sampling covers all cows in lactation (for ELISA) and all cows present at the farm (for serology test). During three remaining quarters the service samples milk from all cows that at the moment of sampling are in lactation. For each sampled cow, the service inserts the information whether the cow is in lactation or not. This data is hold in database (SNIRA). Following each sampling period, the data inserted and calculates the percentage of cows in lactation is verified. DGAV presented data demonstrating that the percentage of cows sampled per quarter exceeded 30%, therefore providing assurance that the annual average also exceeded required 30%."

TASK FORCE

There was a Task Force subgroup of "bovine, sheep and goats brucellosis visit to Vila Real, North of Portugal, from 15-16 may 2014. As regards the implementation of the recommendations (Rec) state of play on this:

Rec "Improvement of vaccination coverage"

RB51 vaccination coverage followed by the regional veterinary services, was applied in all areas under this type of programme with no problem.

Rec "Clear requirements to take the decision to stop vaccination in particular areas"

Vaccination was exclusively carried out in the epidemiological units defined in the special vaccination programmes. These define the measures to be taken, in particular the timetable for testing, health management of the herd, movements of animals into and out of the herd, animal identification, the vaccination strategy (young and/or adult animals) and any other information considered necessary. The necessary requirements to stop vaccination in particular areas depends on the favourable evolution of the epidemiological situation at the epidemiological units and it includes the following:

- No positive herds for the last 3 years;
- No clinical or other sign of Brucella infection.

Regarding this subject, decision was taken to stop vaccination on the islands of the Autonomous Region of Azores (RAA) and now 8 of the 9 islands are disease free regarding Bovine brucellosis.

Rec "Guidelines on management of FPSR harmonized at national level in order to help the management of these cases"

Guidelines for the use of "Brucellosis skin test (BST)" were in place till 2020 and for exclusive use of official services (DGAV).

Rec "Guidelines for stamping out of infected herds/flocks after reactors removal harmonized at national

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

level”

Guidelines for stamping out were harmonized at national level.

Rec “Compulsory application of total depopulation in outbreaks occurring in free areas”

The decision for depopulation was taken into consideration.

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 general objective is to contribute to a high level of health for humans and animals and by eradicating this disease in a medium-term period, ensuring a high level of protection for consumers.

The progress expected compared to the situation of the disease in the previous years, in line with the objectives and expected results is already mentioned in this programme.

In determining cost effectiveness, several factors must be considered as direct losses related to the disease (due to morbidity and reduced production) and indirect losses, which can include barriers to free trade, particularly as regards animals' movement for the purposes of intra-Community trade. Eradication of brucellosis therefore tends to increase productivity (raising the revenue to operators) and avoid costs inherent to the programme and related to trading constraints.

The increase in the number of disease-free establishments reduces the costs of successive visits and tests on the animals in establishments, slaughter of animals on health grounds and losses arising from the restriction of movement.

Furthermore, apart from the direct and immediate benefit of the reduction in the amount of compensation paid, a reduction in the number of animals slaughtered brings with it all the benefits of improving the genetic heritage and the socio-economic benefits resulting from the raising of the status of the herds, both at the level of the individual producer and at the level of the various regions of the country.

The incalculable benefits resulting from the reduction in the rates of infection in the animal population and the reduced probability of transmission of the disease to the population also deserve to be mentioned.

In relation to the number of human cases reported, despite the under reporting that might exist, there are a continuous reduction of the numbers of notified human cases, 11 in 2021 (provisional data). For these reasons, investment in a programme such as this is extremely positive, even if it is difficult to quantify.

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

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 : **2023**

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
DSAVR Norte	Rose Bengal test	Bovines	blood	qualification	161 200	X
DSAVR Lisboa e Vale do Tejo	Rose Bengal test	Bovines	blood	qualification	104 200	X
DSAVR Alentejo	Rose Bengal test	Bovines	blood	qualification	393 560	X
RAA S. Miguel	Rose Bengal test	Bovines	blood	qualification	84 000	X
DSAVR Norte	complement fixation test	Bovines	blood	qualification	34 400	X
DSAVR Lisboa e Vale do Tejo	complement fixation test	Bovines	blood	qualification	28 430	X
DSAVR Alentejo	complement fixation test	Bovines	blood	qualification	58 730	X
RAA S. Miguel	complement fixation test	Bovines	blood	qualification	6 500	X
DSAVR Norte	Elisa test	Bovines	milk	qualification	1 350	X
DSAVR Lisboa e Vale do Tejo	Elisa test	Bovines	milk	qualification	230	X
DSAVR Alentejo	Elisa test	Bovines	milk	qualification	118	X
RAA S. Miguel	Elisa test	Bovines	milk	qualification	5 000	X

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

DSAVR Norte	bacteriological test	Bovines	Organs, foetuses, placen	qualification	2	X
DSAVR Lisboa e Vale do Tejo	bacteriological test	Bovines	Organs, foetuses, placen	qualification	1	X
DSAVR Alentejo	bacteriological test	Bovines	Organs, foetuses, placen	qualification	4	X
RAA S. Miguel	bacteriological test	Bovines	Organs, foetuses, placen	qualification	3	X
DSAVR Norte	Elisa test	Bovines	blood	confirmation of suspected cases	4	X
DSAVR Lisboa e Vale do Tejo	Elisa test	Bovines	blood	confirmation of suspected cases	3	X
DSAVR Alentejo	Elisa test	Bovines	blood	confirmation of suspected cases	10	X
RAA S. Miguel	Elisa test	Bovines	blood	confirmation of suspected cases	3	X
Total					877 748	
Add a new row						

	Total number of tests
Total number of tests	877 748
Rose Bengal test	742 960
complement fixation test	128 060
Elisa test	6 718
bacteriological test	10
PCR	0

7.1.2 Targets on testing herds and animals

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

7.1.2.1 Targets on the testing of herds for year : 2023

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	Target indicators			
									Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
DSAVR Norte	Bovines	16 640	12 760	12 760	1	1	1	100,000	100,000	0,008	0,008	X
DSAVR Lisboa e Vale d	Bovines	1 924	1 740	1 740	1	1	0	0,000	100,000	0,057	0,057	X
DSAVR Alentejo	Bovines	4 850	4 800	4 800	2	2	2	100,000	100,000	0,042	0,042	X
RAA S. Miguel	Bovines	2 036	1 658	1 658	0	0	0	0,000	100,000	0,000	0,000	X
Total		25 450	20 958	20 958	4	4	3	75,000	100,000	0,019	0,019	
									Add a new row			

7.1.2.2 Targets on the testing of animals for year : 2023

							Slaughtering	Target indicators	
--	--	--	--	--	--	--	--------------	-------------------	--

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

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)	
DSAVR Norte	Bovine	261 240	240 892	173 750	136 240	2	10	50	72,128	0,001	X
DSAVR Lisboa e Vale do T ⁺	Bovine	155 960	144 213	100 530	88 460	1	1	1	69,709	0,001	X
DSAVR Alentejo	Bovine	574 660	541 009	336 810	330 520	4	20	180	62,256	0,001	X
RAA S. Miguel	Bovine	133 165	88 000	88 000	83 000	3	3	3	100,000	0,003	X
Total		1 125 025	1 014 114	699 090	638 220	10	34	234	68,936	0,001	
								Add a new row			
Total number of animals expected to be slaughtered or culled : BOVINES								234			
Total number of animals expected to be slaughtered or culled : BUFFALO								0			
Total number of animals expected to be tested								699 090			

7.2 *Targets on qualification of herds and animals*

7.2 *Targets on qualification of herds and animals for year :* **2023**

Targets on the status of herds and animals under the programme											
										Expected not free or not free from disease	

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

Region	Animal species	Total number of herds and animals under the programme		Expected unknown		Last check positive		Last check negative		Expected free or officially free from disease status suspended		Expected free from disease		Expected officially free from disease		
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
DSAVR Norte	Bovines	12 760	240 892	0	0	0	0	1	16	0	0	55	863	16 584	260 361	X
DSAVR Lisboa e Val	Bovines	1 740	144 213	0	0	0	0	0	0	1	81	35	2 837	1 888	153 042	X
DSAVR Alentejo	Bovines	4 800	541 009	0	0	0	0	2	237	0	0	15	1 777	4 833	572 646	X
RAA S. Miguel	Bovines	1 658	88 000	0	0	0	0	0	0	0	0	0	0	2 036	133 165	X
Total		20 958	1 014 114	0	0	0	0	3	253	1	81	105	5 477	25 341	1 119 214	
												Add a new row				

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment for year: **2023**

Region	Animal species	Targets on vaccination or treatment programme									
		Total number of herds in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Number of herds in vaccination or treatment programme	Number of herds expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered	Number of adults expected to be vaccinated	Number of young animals expected to be vaccinated		
Portugal	Bovines	0	0	0	0	0	0	0	0	0	X
Total		0	0	0	0	0	0	0	0	0	

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

							Add a new row	
--	--	--	--	--	--	--	----------------------	--

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

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))

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

(max. 32000 chars):

a) Implementing entities regarding sampling:

Continental territory: The diagnostic tests on holdings (sampling) are carried out by authorised private veterinarians of the livestock producers' associations (OPP) under the supervision of DGAV. Sampling is paid to the OPP by DGAV and by the owner of the animals.

Material and financial execution of the programme is supported by an animal health and food security fund from the Ministry of Agriculture and Food.

Autonomous Region of Açores, S. Miguel Island: Sampling is performed and paid by the Official Veterinary Services (State Budget) In, the Official Veterinary Services have protocols firmed with Farmers Associations and are those private vets that perform the blood tests, unless in positive herds, that are performed by official veterinarians. All material is purchased by Veterinary Official Services with state budget that also pays one amount to these associations for each test performed, based on the protocols. Sampling equipment is provided by the official laboratory (Veterinary Regional Laboratory of Açores - LRVA) that tests the samples which include the price in the invoice which is paid by the local state veterinary services (state budget) - farmers don't have any expense with tests included in Official Eradication Plans.

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):

b) Implementing entities regarding testing:

Continental territory: testing of official samples are performed by public and private regional laboratories and by the national reference laboratory (INIAV.I.P). The testing costs are paid by DGAV and co-financed by European Commission.

Autonomous Region of Açores, S. Miguel Island: testing is performed by the Official Veterinarian Regional Laboratory (LRVA) and costs related to this are entirely paid by the state budget.

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

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):

c) Implementing entities regarding compensation to owners is paid by a public Institute - IFAP (Financing Institute for Agriculture and Fisheries) at central level of the state veterinary services.
Regarding Autonomous Region of Açores, S. Miguel Island: Regional part of the compensation is paid by the Regional level of the state veterinary services.

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):

d) Vaccination is not applied.

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

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

(max. 32000 chars):

e) Other essential

Continental territory: other essential measures like the collection samples at the slaughterhouse by official vets and the transport to the abattoir of positive animals are paid by DGAV. Animal identification and disinfection of holdings resulting from the slaughter of positive animals are paid by the farmers. Measures includes clinical exam of animals, issuing of certification and movement documents, desinsectization and issuing of the respective certificating documents. These are executed by private veterinarians, most of them from the OPP, paid by the farmers.

Autonomous Region of Açores, S. Miguel Island: all measures and equipment/services are paid by the regional state veterinary services.

2. 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

3. 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.

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:

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

--

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

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
	18935_14643.pdf	18935_14643.pdf	597 kb
	18935_14644.pdf	18935_14644.pdf	288 kb
	ERAFUNDSPESTFUNDS_PPD.pdf	ERAFUNDSPESTFUNDS_PPD.pdf	288 kb
		Total size of attachments :	1173 kb