

# Annex I.b: Programme for the eradication of bovine Tuberculosis, bovine Brucellosis or sheep and goat Brucellosis (B. melitensis) submitted for obtaining EU cofinancing

Member States seeking a financial contribution from the European Union for national programmes of eradication, control and surveillance shall submit online this application completely filled out.

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- 7) For simplification purposes you are invited to submit multi-annual programmes.
- 8) As mentioned during the Plenary Task Force of 28/2/2014, you are invited to submit your programmes in **English**.

**Submission Date** 

Submission Number

Tuesday, January 12, 2016 16:49:49

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## 1. Identification of the programme

Member state :	PORTUGAL
0.1	
Disease	Sheep and goat brucellosis (B. melitensis)
Species:	Sheep and goats
This program is multi annual	:no
Request of Union co-financing from beginning of:	2016

#### 1.1 Contact

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### 2. Historical data on the epidemiological evolution of the disease

Provide a concise description of the following indicators:

- Number of serologically positive domestic pigs compared to previous year
- Number of virologically positive domectic pigs compared to previous year
- Numbe of serologically positive wild boar/feral pigs compared to previous year
- Number of virologically positive wild boar/feral pigs compard to previous year
- An assessment of the evolution of the indicators along the years is requested as well as obstacles and contrains indentified that hamper the progress of eradication.

#### (max. 32000 chars):

Brucellosis is a notifiable disease since 1953, according with Decree-Law No 39209 of 13 May. Measures to combat brucellosis in small ruminants in Portugal have been introduced since that date, with campaigns to control brucellosis in goats and it was extended to cohabiting sheep.

In 1980, a new stage in disease control began with the application of the "Programme bases for organising the actions to combat animal brucellosis", produced as a consequence of the WHO recommendations to the countries of the Mediterranean basin.

In 1991, following Portugal's entry in 1986 into the then European Community, the eradication programme for brucellosis in small ruminants in mainland was approved for co-financing for a period of three years and subjected to annual approval thereafter. The programme, with the necessary adaptations over time is still in force.

The Autonomous Region of Azores is officially free of Brucella melitensis.

Along with the policy of serological survey (serology by Rose Bengal and Complement Fixation tests) and slaughter of positive animals carried out for the eradication, vacination of young animals with Rev1 vaccine is applied in certain areas with higher prevalence namely in Trás-os-Montes in the region of the Regional Directorate of Food and Veterinary Services (DSAVR) Norte, the entire Algarve Region (DSAVR Algarve) and some units of Centro Region and Lisboa e Vale do Tejo Region (LVT).

The attached document with "PT-Bpr sheep and goats structure of production and epidemiological data" show the recent results of the programme.

Briefly, this programme started with 12% flock prevalence in 1993 (2 years after the beginning of the programme, when a good coverage was reached), with 1202 human reported cases. Small ruminant's brucellosis became under control over time, with marked differences between regions where production systems and specially the rate of contacts between flocks and exposure to contaminated environment.

In the Norte Region, Trás-os-Montes in the mountainous interior was one of the most problematic areas of the country and represents 16% of the Portuguese small ruminants holdings. In 1991, 26.7% of flocks tested positive and although vaccination of young females was foreseen for infected flocks, this was difficult to implement. By 2000, the regions presented a flock prevalence of 43.0% and an animal prevalence of 8.9% with 40% of animals slaughtered at national level, resulting in heavy losses for the farmers, and a high cost for the Government. Under these circumstances an especial mass vaccination campaign appeared as the best option for the disease control, following extensive discussions among interested parties. Vaccination of adult and young animals with conjunctival Rev1 started in February 2001 and lasted for 3 years. In the first year of activity 67% of population was covered. In 2004 adult vaccination was halted but replacement animals vaccination was adopted as the policy for this area, along with test and slaughter. At present, Trás-os-Montes presented around 5.6% flock prevalence (in a total of 5100 flocks) and 0.5% animal prevalence (in a total of 275.480 animals) and further improvement of the epidemiological situation has been difficult. It was noticed in 2013 and 2014 that half of the positive flocks had just few vaccinated animals positive to serology and without isolation of Brucella in the bacteriological tests carried out in positive slaughtered animals.

Centro Region had 2 different realities, in the litoral lest affected and the mountainous interior area more affected with brucellosis, at the start of the programme, with extensive use of common pastures and transhumance. Due to the implementation and the persistent control and eradication measures applied, brucellosis was reduced and in 2014, 0.13% of positive flocks was achieved, with a decreasing trend.

Lisboa e Vale do Tejo Region had a favourable situation and applied mostly a test and slaughter policy. At the end of 2014 a new outbreak appeared at the area of Setubal, due to the problem arising with one OPP. The dissemination of disease lead to the adoption of a vaccination strategy of adul and young animals in infected flocks in a area with 200 flocks and 10.700 animals. This region, in 2014 presented 0.81% of positive flocks with an increase of epidemiological indicators.

Algarve Region is another problematic area were over 50% of the flocks located have about 1 to 10 animals intended for the production of lambs for self-consumption or sale and occasionaly young animals are kept for replacement. From 1992, test and slaughter with some vaccination of young animals was implemented but it was only from 1995, with the establishment of the three OPPs in the region, that the eradicate programme covered all flocks in this Region. The strategy, based on test and slaughter policy performed from 1992 to 1999, had several shortcomings due to the frequent contact in common pastures used by animals from different holdings and also due to the fact that many keepers of animals were at the same time traders and producers. Therefore, from 2000 to 2004 several measure were reinforced like the use of CFT in RB negative animals in infected flocks, the improvement of animal identification (tattooing and electronic identification), training of farmers, stricter control measures of

holdings under sanitary restrictions, depopulation of infected holdings (without health status improvement throughout the years). It was only in 2005 that systematic subconjuntival Rev1 vaccination of young animals was implemented, in the most affected municipalities, along with test and slaughter. From 2005 to 2009 there was some overlap of the vaccination campaigns against bluetongue and brucellosis. The technical teams of the OPPs involved did not have the opportunity to implement both health programmes in due time. From 2010 till part of 2012, the team of Faro/DAV took part in vaccination programme with and around 50% of the animals were vaccinated in that time. In 2014 the region of Algarve presented 1,88 % positive flocks with a decreasing trend. Actions to increase the efficacy of the programme are implemented as in other parts of the country, including:

- improve animal identification, taking Regulation No. 21/2004 into account, and control animal movement;
- implement timely surveys and retesting of positive flocks; apply the CF test in RB negative animals in infected flocks;
- reduce the time between blood sampling and the slaughter of reactors;
- reduce the time for paying compensation;
- carry out epidemiological surveys of all new outbreaks and apply suitable penalties for infringements in accordance with Decree-Law No 244/2000 of 27 September 2000;
- reinforce vaccination of young replacement animals, male and female;
- ensure the complete slaughter of flocks infected with chronic brucellosis whose health situation has not improved over the years;
- make field visits to check correct application of the rules for execution of the health programmes performed by the OPPs;
- provide health education initiatives for breeders.

### 3. Description of the submitted programme

Provide a concise description of the programme with its main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence), the main measures (sampling and testing regimes, eradication measures to be applied, qualification of herds and animals, vaccination schemes), the target animal population, the area(s) of implementation and the definition of a positive case.

#### (max. 32000 chars):

#### Introduction

The programme will be implemented throughout mainland Portugal, for a period of one year, with the objective of achieving a gradual and sustained decrease of prevalence and incidence of disease in order to allow the country to achieve disease-free status in medium term.

According to national legislation, the following definition in place:

- Flock: is a group of animals of the same species or different species, maintained in a holding as an epidemiological unit; if there is more than one flock in holding must form a distinct unit with the same health status;
- Epidemiological unit: is one flock or certain number of flocks from a geographic area, with similar managements or regular/ frequent contact with each other that are managed from a single epidemiological point of view;
- Epidemiological area: defined as a contiguous geographical area and set administratively, with agricultural characteristics, livestock and epidemiological identical strategies in which the combating brucellosis should have an identical approach, may consist of: Parish(s), county(s), DAV or DSAVR.

The programme is applied to male and female ovine and caprine over 6 old (or over 3 months if vaccinated) on the holdings covered, with the exception of fatening animals from officially disease-free flocks, provided that they are not used for breeding and are taken directly for slaughter.

#### Surveillance

The programme is based on a regular annual survey of all breeding flocks with RBT and CFT is used as a confirmatory test. Some regions have already achieved a favourable epidemiological situation allowing the sampling of flocks, in accordance with legislation (Directive 91/68/EEC). Regular surveys are carried out by private veterinarians of producers associations (OPP) and samples submitted for analysis to local approved laboratories. Data is introduced in an information system PISA.net and the official veterinary services (DSAVR) attribute the classification according with test results. PISA.net allows the exchange of information necessary to the sequential activities of the programme, the maintenance of updated flocks classification and the reporting of results.

Epidemiological investigation and bacteriology of organs of slaughtered positive animals are also tools used in the programme, for brucellosis traceback and confirmation.

#### Measures in positive holdings

When positive results are found, a series of actions take place in order to control the suspected outbreak and confirm brucellosis. There actions are explained in point 4.4.9.

Under the brucellosis programme, every sheep and goats holding is classified and this health classification is maintained or changed, according to the criteria set out in national legislation and established written procedures ("Manual of procedures for health classification"), which include the reasons for suspending and lower the classification and the testing regime to be applied to improve flock classification.

The classification of areas, based on the minimum area of a Food and Veterinary Intervention Division (DAV), and is the decisive strategic objective for the implementation of the programme. Point 4.4.6. describe tests and sampling schemes, as well as the attached document named "PT\_Bpr\_flowchart on sanitary classification".

#### Measures regarding animal movement

Animals from officially disease-free herds alone may be moved without restrictions. This control is based on the updated information concerning flock' status recorded in the database for the registration and identification of bovine animals (SNIRA).

Herds with suspended (B3S and B4S) or non-brucellosis free status (B2 and B2.1) are only allowed to move animals to slaughter, under official control, and regular checks on movements are scheduled in SNIRA. Movement control is explained in detail in point 4.4.5.

#### Vaccination

Special vaccination programes will be carried out in some regions, to increased control of the disease: the Trás-os-Montes area (DSAVR Norte), the DSAVR Algarve and some units of DSAVR Centro and DSAVR LVT. The programmes are detailed in point 4.4.7.

Other specific measures for improving the programme:

- 1. Uninterrupted routine implementation of all the procedures:
- The interval between the arrival of sera at the serology laboratory and the issuing of the results should be one week.
- Positive animals should be removed from holdings in 90% of cases within 30 days of receiving the laboratory results;
- The health status should be attributed by the DAVs within 15 days of receipt of the laboratory results.
- 2. Systematic identification of holdings that are epidemiologically linked to outbreaks by means of an epidemiological survey conducted on the day of quarantining, or soon after; re-assessment and adaptation of the survey;
- 3. Raising producers' awareness of the plan to ensure its success, their personal protection and the protection of animal products;
- 4. Stepping up the checks on the identification (e.g. the composition of flocks between rehabilitation measures) and movements of animals, especially on quarantined infected holdings;
- 5. Requiring B2 and B3S flocks to be restocked with vaccinated animals;
- 6. Adjusting compensation for slaughter, increasing the additional amount in line with compliance with health regulations;
- 7. Continuous assessment of the eradication programme based on collection and regular analysis of epidemiological data;
- 8. Meeting the OPPs at least once every year; carry out inspections to OPP;
- 9. Holding periodic meetings and cooperation with the health services.

### 4. Measures of the submitted programme

### 4.1 Summary of measures under the programme

Duration of the programme: 2016
First year:
Control
∀accination
Treatment
□ Disposal of products
□ Eradication, control or monitoring

### 4.1.1 Timeline for the eradication

*Provide the timeline foreseen for the eradication with detailed justification (max. 32000 chars) :* 

According to the WD Sanco/10181/2014, the expected results (targets) have to decrease as following:

- In 2016 0,77% herd prevalence and 0,56% herd incidence;
- In 2017 0,62 % herd prevalence and 0,45% herd incidence.

However, it has to be taken into account that the reduction foreseen in this table, could be lower, because Portugal is close to the eradication, being the last step of eradication more difficult to manage and to achieve. According to the infection results, performed on the last years, there is a decrease in the percentage of positive flocks (flocks with at least one positive animal to RBT and CFT) from 1.10% in 2013 to 0.88% in 2014. The coverage of the programme was 93% of sheep and goats and at the end of the year there were 295 non indemne flocks (in comparison to 444 in the end of 2013).

Most difficulties were related to the control of contacts due to the type of production systems in Portugal and the existence of positive serology in vaccinated animals, in the absence of any sign of disease (including in non-vaccinated animals in the same flock).

### 4.1.2 Interim targets in relation to the timeline for eradication

based on herd prevalence and herd incidence at different periods in link with the timeline for eradication (max. 32000 chars):

In addition to data mentioned on point 4.1.1., there are regional differences in the epidemiological situation of sheep and goats brucellosis, with lack of progress at the Norte Region (DSAVRN) and some progress in the Centro Region (DSAVRC). Lisboa e Vale do Tejo Region (DSAVRLVT) had several

outbreaks in a specific region.

Alentejo and Algarve Region (DSAVRALT and DSAVRALG) achieved progresses.

The Autonomous Region of Azores is officially free and maintained its status.

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

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

(max. 32000 chars):

The Directorate-General for Food and Veterinary Services (DGAV) is the authority responsible for the control and eradication of brucellosis in small ruminants and at central level (DSPA) is responsible for coordinating, monitoring and reporting of the programme.

The Directorates for Regional Food and Veterinary Services (DSAVR), decentralised services of the DGAV, are responsible not only for overseeing implementation of the various activities under the Programme in their area but also for implementing health policy measures and maintaining updated the flocks sanitary classification in accordance with the results of the laboratory tests (serology and bacteriology) and the compliance with other measures.

The DSAVRs of the five regions in which the programme is applied are identified by the following abbreviations:

DSAVRN - Norte

DSAVRC - Centro

DSAVRLVT – Lisboa e Vale do Tejo

DSAVRALT - Alentejo

DSAVRALG - Algarve

Most field activities of this eradication programme, are implemented by private veterinarians from Livestock Producers Organisations (OPPs) which annually submit an annual sanitary programme to be approved by the official services. There is one veterinary co-ordinator per OPP. Each OPP is assisted by several veterinarians. The OPP is responsible for: animal identification, animal vaccination, blood sampling; informatisation of the data and communication to the regional veterinary services of all irregularities. Blood samples collection for diagnostic tests, as well as animal identification and farmers information, are carried out by the livestock producers' associations (OPP) on approximately 99% of flocks and by the DSAVR or contracted veterinarians in 1% of flocks to be checked. Whoever takes the samples is responsible for delivering them to the laboratory and to introduce primary data on sampling in the national animal health database (PISA.Net).

The diagnostic laboratories enter the serology results in PISA.Net and therefore they are immediately available in the DSAVRs, which validate them and then validate the retention of health status.

Whenever positive results emerge the DSAVR sets the following procedures:

- In B4 and B3 flocks the health status is suspended and the holders are notified directly of the results

obtained and of the imposition of restrictions on movement, the animals intended for slaughter on health grounds are marked, and transport and slaughter are undertaken under its responsibility.

- In B4S, B3S, B2 or B2.1 flocks the holders are informed of the results obtained, the animals intended for slaughter on health grounds are marked and transport and slaughter are undertaken under its responsibility.

The DSAVRs enter the slaughter data on PISA.Net and instruct the OPPs to organise the checks to follow up the positive flock. The DSAVRs undertake the epidemiological survey when applicable. The DSAVRs also organises the process of compensating the holder.

The Instituto Nacional de Investigação Agrária e Veterinária, I. P. [National Agrarian and Veterinarian Research Institute – INIAV] acts as the National Reference Laboratory in the specific areas of food safety and animal and plant health. The INIAV, I.P. is the reference laboratory for brucellosis and is responsible for coordinating and supervising the regional screening laboratories and for standardising and certifying the diagnostic methods used. In addition to the routine laboratory analyses for brucellosis it carries out bacteriological examinations, the results of which are automatically reported to the DGAV.

The INIAV., I.P. carries out the typing of Brucella in cultures, detects brucella in biological matrices of animal origin and carries out brucellosis diagnosis, rapid agglutination tests, Rose Bengal test and Complement Fixation test.

All the laboratories involved in the Brucellosis Eradication Programmes are accredited by Portuguese Accreditation Body, called IPAC. Regarding the activities implemented by the NRL to effectively monitor and control the technical competence of such laboratories, in September 2010 a questionnaire was sent by Quality Assurance Office (QAO), to each laboratory performing analysis for Brucellosis Eradication Programmes, requesting their laboratories codes, to monitor their performances on Proficiency Tests, organized by VETQAS PT0015 "Brucella abortus CFT", PT0020 "Brucella abortus RBT and PT0018 "Brucella abortus milk ELISA". Participations on the mentioned Proficiency Tests were advised by QAO. VETQAS is Animal and Plant Health Agency's independent, accredited by UKAS, under ISO17043 for proficiency testing (PT) based in Leicestershire. It is the international market leader in proficiency testing (PT) for veterinary laboratories, with over 30 years experience.

NRL provides to official Labs the Positive and Negative Serum for RBT and CFT techniques. NRL provides to official laboratories staff, technical training either for initial qualification or requalification on RBT, CFT and ELISA techniques (ELISA only for Bovine Brucellosis).

The regional private screening laboratories are the following:

- SEGALAB Animal Health and Food Safety Laboratory
- PROLEITE Cooperativa Agrícola de Produtores de Leite, C.R.L. (Dairy producers' cooperative)
- The Union of ADS (Health Protection Groups) Laboratory in Viseu District
- LMV- Laboratory of Veterinary Medicine
- ASSISVET
- COPRAPEC Veterinary laboratory of Montemor-o-Novo
- ACOS Association of sheep farmers in southern Portugal.

The owner or person responsible for the animals must provide the appropriate means for the execution of all the official procedures and for the implementation of the standards of animal identification and

animal movement. The holder must also allow the transport to the slaughterhouse of positive animals, comply with movement restrictions and the others sanitary determinations due to a stamping out decision. They have the right to compensation for slaughter on health grounds provided they assume their responsibilities pursuant to the laws that apply.

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

Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

(max. 32000 chars):

The eradication programme will continue to be implemented throughout the territory of mainland Portugal (see attached "PT\_Bpr Maps programme").

Regions covered by the programme and identified in the map are the following:

- 1. Directorate for Food and Veterinary Services of the Region of Norte (DSAVRN),
- 2. Directorate for Food and Veterinary Services of the Region of Centro (DSAVRC),
- 3. Directorate for Food and Veterinary Services of the Region of Lisboa e Vale do Tejo (DSAVRLVT),
- 4. The Directorate for Food and Veterinary Services of the Region of Alentejo (DSAVRALT),
- 5. The Directorate for Food and Veterinary Services of the Region of the Algarve (DSAVRALGARVE).

### 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 has been a notifiable disease since 1953 and thus appears on the Schedule of Diseases annexed to Decree Law No 39:209 of 1953. The requirement to notify is reinforced by Decree-Law No 244/2000 of 27 September 2000 and by Decree law No 79/2011 of 20 June 2011. Treatment of the disease is explicitly forbidden.

Under Article 7 of Decree-Law No 244/2000 of 27 September 2000, owners of animals are required to notify all abortions occurring in female bovine, ovine and caprine animals: these must give rise to an epidemiological investigation and the collection of material for bacteriological diagnosis. At alínea d) of Ordinance 178/2007 and its amendments, is also foreseen the obligation of producers associated to Livestock Producers Organisation (OPP) to report to the veterinarian of any abortions occurred in bovine, ovine and caprine of their holding and the veterinarian as to inform the SVO about risk situations identified in the holdings of their associates.

The rules for collecting and sending material from abortions to the laboratory are drawn up jointly by the DGAV and the INIAV and published on the DGAV and INIAV websites.

The INIAV, as the body that executes the programme (pursuant to Article 4(c) of Decree-Law 244/2000 of 27 September 2000, carries out the respective bacteriological diagnostic tests and sends out results according to rules defined by the DGAV. Investigations are carried out on holding of origin whenever positive results to Brucella.

Continuous efforts have been made to encourage producers to improve the notification of abortions. The OPP veterinarians who implement the plan frequently visit holdings for the purposes of taking the steps under the eradication programme and disease prevention measures affecting production and treating clinical cases (among others), and they therefore play an important role in this dissemination.

### 4.4.2 Target animals and animal population

(max. 32000 chars):

The target population of the programme are sheep and goats of breeding flocks over 6 months of age (unless being vaccinated which can be from 3 months old). The number of animals is estimated to be around 1.558.000 for 2016, and the number of holdings around 61.000. Please see point 7.

## 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 sheep and goats are described in Decree-Law No. 142/2006 of 27 July 2006 with its the amendments, setting up the National System for the Identification and Registration of Animals (SNIRA). This sets out the rules for the identification, registration and movement of animals, the legal arrangements for assembly centres, traders and transporters, the regulations for the functioning of the Carcass Collection System for Fallen Stock on Holdings (SIRCA).

Keepers of ovines and caprines must supply the competent authority, upon request, with all information concerning the origin, identification and the destination of animals which they have owned, kept, transported, marketed or slaughtered.

Registration of sheep and goat holdings is mandatory, and the Regional Food and Veterinary Service Directorates (DSAVR) are exclusively responsible for assigning the mark to each holding whose registration has been authorised.

The holding mark is a code which consists of a unique combination of letters and numbers, preceded by the country code (PT) and followed by a dash and a capital letter identifying the animal group. The first two characters are letters which identify the region and the municipality where the holding is situated, followed by the holding registration for the municipality concerned, which comprises three digits.

The system for the identification and registration of sheep and goats comprises the following elements: a) an ear tag and/or means of electronic identification;

- b) movement documents;
- c) a national database which monitors the issue of the movement documents according to the health status of the holdings concerned.

Animals must be identified within six months of birth and, in any case, before leaving the holding of birth. In the case of sheep and goats reared in extensive farming or free range, the time limit referred to in the preceding paragraph is nine months.

Animals up to the age of 12 months which are sent directly to slaughter or to a collection centre which also sends them for slaughter on national territory may be identified by means of an ear tag bearing the code of the holding of birth, which is acquired by the keeper and applied to the left ear.

Keepers of small ruminants are required to electronically identify animals born on their holdings after 1 January 2010 (Regulation EC 21/2004 of 17 December 2003). The identification material consists of a kit with a conventional ear tag and a ruminal bolus both bearing the same code. The male part of the conventional ear tag is salmon pink or green (for animals vaccinated with Rev-1) and the female part is yellow.

For small animals or those under six months of age that are being shipped to a foreign destination, yellow kits are used, with a tag and an electronic tag, ans this eletronic tag is applied to the left ear. Kits used for early-vaccinated animals are green tags in combination with an electronic tag, which avoids a second visit to holdings, mainly in areas where access is difficult.

Provisional identification with individual code in Portugal occur when there is movement or santary actions in young animals still with no corpulence to application bollus of 70 grams, which are used as a rule in our country (kit: earring + bollus). These measures are implemented to animals between 3 and 6 months of age, and always before 6 months of age.

It is mandatory for the producer to carry out annual declaration of existences of their small ruminants and its is also mandatory to keeper register and the holding register at the Central Holding Register and Animal Movement database (SNIRA).

For the purposes of any movements, in addition to the mandatory identification, sheep and goats must be accompanied by the documentation provided for in the above-mentioned Decree-Law. The documents are issued by IDigital/SNIRA by request of the producer of origin, according to the health status of the holdings concerned, and it is then up to the destination to confirm the arrival of the animals within 7 days.

The animal health database PISA.net which contains information on implementation of animal sanitary health measures also contains information on a holding's health status and communicates this information to SNIRA. This database records information concerning:

- identification of ruminants holdings;
- identification of small ruminants subject to checks;
- all checks carried out on holdings and animals, and their respective results;
- the health classifications of all existing holdings;
- all compulsory sanitary slaughter.

It should also emphasize the purpose of electronically identify with ruminal bolus all animals present in the infected farms (B2.1).

## 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):

Qualification of animals and flocks is carried out in accordance with Directive 91/68/ECC, Decree-Law no 244/2000, the Manual of classification and their adaptations.

The existing health classifications are:

- B2 non-free
- B3 disease-free
- B4 officially free

In addition the following status are also attributed under the programme:

- B2.1, used whenever the presence of infected animals in which bacteria of the genus Brucella have been isolated and identified during laboratory post mortem examinations or others;
- B3S, used whenever disease-free classification is suspended;
- B4S, used whenever officially free classification is suspended.

The rules for the maintenance, suspension, withdrawal and upgrading of holdings' health status are presented in point 4.4.6. the following:

- B3 and B4 flocks: if all ovine and caprine animals have been free from clinical symptoms or any other signs of brucellosis for at least 12 months and have completed the established programme of tests. The notification of all abortions occurring in ovine or caprine females is compulsory.
- B3S and B4S flocks: the classification is suspended whenever a plan is not being complied with, brucellosis is suspected in one animal or more, if the epidemiological survey determines that infection is a possibility or serological testing yields positive results.
- B2.1 infected flocks: free and officially disease-free health statuses are withdrawn to infected wherever the presence of Brucella is confirmed though its isolation in a bacteriological examination of samples taken from sanitary slaughter or life in suspect animals.
- B2 non-free flock: is a flock undergoing health measures that upgraded from B2.1 status after 2 negative results in two successive serological tests carried out to all ovine and caprine over six months old, with the first check being carried out 30 days after the slaughter of the last animal which tested positive, and the second 60 days after the first. In DSAVR Norte programme, specifically Trás-os-Montes Region, 3 positive serological reactions in a flock also leads to the attribution of B2 status.
- B2 herds regain disease-free or officially disease-free (B3, B4) status if they obtain negative results in two successive serological tests, with a minimum interval of 3 months, performed to all caprine and ovine animals over six months of age.

See the attached table with the procedures for health classification "PT\_Bpr\_flowchart of sanitary classification".

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

(max. 32000 chars):

Measures for the identification, registration and movement of sheep and goats are described in Decree-Law N.o 142/2006 of 27 July 2006 with its the amendments, approves measures for monitoring animal movements.

Animal movements depend on the flock's health status. Animals from B3 and B4 holdings may be moved without any restrictions.

There is a ban on movements from and to B2.1 holdings, except for seronegative animals destined for immediate slaughter.

The updating of health status on PISA.Net is undertaken by the veterinary services that validate the maintenance and record the suspension or alteration of flocks' status.

The DSAVRs check the restrictions on movements by visiting holdings when required, as do the OPPs when visiting the holdings in their areas, when they check the number of animals in the flocks. If any irregularities are detected the OPP informs the DSAVR, which initiates the respective health-infringement procedures.

The movement of sheep and goats from their holdings of origin to pastures for a set period and the transhumance of sheep and goats are permitted only when these animals come from flocks that are disease-free or officially brucellosis-free.

Such movement is subject to compliance with the rules and standards set out in health regulations produced by the veterinary services of the regions where this practice is more widespread and it is ensured that the following rules are observed:

- sheep and goats are identified in accordance with the laws in force;
- animals moved present no evident symptoms of any parasitic disease or infectious contagious disease;
- animals come only from holdings and areas that are not subject to any health restriction;
- animals must come from holdings with officially brucellosis-free or brucellosis-free status, and the holding must have undergone serological testing within 6 months or, when possible, undergo premovement testing within the 30 days before the movement in question. The pre-movement tests are mandatory in the event of restocking of holdings following total slaughter (depopulation).

In every case, the conditions are assessed and a veterinarian is appointed who is responsible for ensuring that the rules are upheld by:

- checking the identification of the animals to be moved and ensuring that their origins are authentically documented;
- checking the health documents, in line with the rules issued by the DGAV.
- 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, animal coverage in each herd, interpretation of the test,...)

(max. 32000 chars):

#### Serological testing

Screening is obligatory for all ovine and caprine animals over 6 months of age, or 18 months after been vaccinated with Rev1, and is regulated by Decree-Law No 244/2000 of 27 September 2000.

The Rose Bengal (RBT) and Complement Fixation Tests (CFT) are used, with the following methodology:

- The RBT is carried out on all tested animals, over 6 months of age (or 3 months when vaccinated);
- The CFT is carried out in the following cases:
- a) on RBT-positive animals, in flocks that are officially free (B4) and free (B3) from Brucellosis
- b) on all samples from free (B3) and officially free (B4) flocks if, after performance of the RBT, more than 5% of the samples have produced a positive reaction to this test (RBT);
- c) on RBT-negative animals in free (B3) and officially free (B4) flocks if, after performance of the CF test, at least one animal shows a positive reaction to this test (CFT);
- d) if so decided by the DSAVR, on all samples from free (B3) and officially free (B4) flocks if, after performance of the RBT, at least one sample has produced a positive reaction to this test (RBT);
- e) to lift the suspension of officially free (B4S) or free (B3S) from Brucellosis flock status (RBT and CFT are conducted in parallel);
- f) in pre-movement tests for restocking (note: as stated above, the pre-movement tests are mandatory in the event of restocking of holdings following total slaughter);
- g) for classification of a non-free (B2) flock as free (B3) or officially free (B4) from Brucellosis;
- h) on RBT-negative animals in flocks infected with Brucellosis (B2.1), irrespective of the existence or otherwise of RBT-positive animals;
  - i) on all animals vaccinated with Rev1 that are RBT-positive, irrespective of the flock's health status.

The criteria of a positive animal to CFT is equal or more than 20 IU/ml.

The methods to be used in the serological testing vary according to the flocks' health classification:

- The serological testing of infected flocks (B2.1), until they achieve disease-free status (B3), or officially disease-free status (B4) will be carried out as follows:
  - a) The serological test is carried out on all animals 30 days after slaughter of the positive animal(s).
- b) Following serological testing of all the animals with negative results, a further serological test will be carried out on all the animals 60 days later.
- c) If all the results of the serological test referred above are negative, the flock will cease to be regarded as infected (B2.1) and will from then on be regarded as not brucellosis-free (B2) and as undergoing rehabilitation:
- d) A further serological test will be carried out on all the animals 3 months later.
- e) If all the results in the serological test referred above are negative, a further serological test will be carried out on all the animals 6 months later. If all the animals test negative, the flock will be classified as brucellosis-free (B3) or officially brucellosis-free (B4).
- f) If any of the above serological tests produce a positive result, the methodology referred to in a) will be followed.

Portuguese law is explicit as regards the detection or suspicion of the presence of brucellosis in flocks. Any flock with suspect or positive animals is quarantined, and no animal may be transferred or sold during this time without the DSAVR's permission. The quarantine will only be lifted further to a decision from the DSAVR.

- In free (B3) and officially free (B4) flocks there is an annual check on all animals of more than six months

of age.

If at least 99.8% of the flocks in an epidemiological unit, parish or set of parishes, municipality or set of municipalities are B3 or B4, serological testing must be carried out once a year on all the flocks, by sampling a representative fraction of the animals over 6 months of age in each flock that produce negative results in the serological tests (non-castrated male animals over 6 months of age, all animals brought into the flock since the last test and 25% of the females of reproductive age).

If, in the epidemiological areas, the percentage of non-free flocks is greater than 0.2%, serological testing must be carried out on all animals.

Whenever sampling reveals that at least one animal has reacted positively for brucellosis, it is slaughtered and the whole flock is tested 30 days later for the purposes of rehabilitation.

If a false positive serological reaction is suspected in B4 flocks (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 with CFT. All seropositive animals (CFT >= 20 IU/ml) in the second test are slaughtered.

If in the second test CFT is negative the suspection is liffed.

#### Bacteriology

Samples of limphnodes and other organs is always collected for bacteriological examination from slaughtered animals that were positive to the Rose Bengal and the Complement Fixation tests, except those from flocks were infection was already stablished (B2.1);

Material for bacteriological examination is collected by sampling 10% of the animals sent for compulsory slaughter from each flock, with a minimum of 5 animals per flock, and this must be done in accordance with the Manual of Diagnostic Procedures – collection and sending of material for identification of Brucella, (INIAV/DGAV).

Microbiological tests are systematically carried out in B3/B4 herds where positive animals are found for the first time. In case of confirmation, the suspended flock is considered an infected flock and extra testing is required for the achievement of indemne status. Procedures have been established through internal orders and through a sample collection (above mentioned manual).

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

(max. 32000 chars):

The importance of the vaccination of animals as a strategy for controlling the disease under the sheep and goats brucellosis eradication programme should be stressed, given that it permits the animals to be protected from infection, reduces shedding of Brucella into the environment and at the same time reduces the number of abortions on holdings and the number of animals slaughtered on health grounds.

The vaccination of female sheep and goats will be carried out strictly by the conjunctival route, full dosis, in the situations described in this programme.

Subcutaneous vaccination is prohibited.

Immunogens prepared with the Rev1 strain of Brucella melitensis, registered by the DGAV and checked by the INIAV.I.P.

The decision to proceed with or cease vaccination will at all times be subject to authorisation from the DGAV, and vaccination programmes have at least a five years duration being re-assessed for periods of the same length.

Vaccination is only carried out in young sheep and goats between 3 and 6 months of age, from infected or non infected flocks, that are well developed, show no evident signs of a debilitating condition (parasitic infestation, excessively thin etc.) or sexual activity, and are serologically negative for brucellosis. Vaccination of adult animals is allowed under conditions defined by DGAV.

All vaccinated animals shall be subject to electronic identification, which, as an alternative to the classic method (a ruminal bolus and a green tag) may use a conventional ear tag and an electronic one. This electronic identification may optionally be supplemented by a tattoo placed in the ear.

In regions of high prevalence (over 2.5%) were vaccination becames mandatory an official notice is issued describing the municipalities (the administrative units within the regions) where flocks are vaccinated. In vaccination areas DGAV may give permission for certain flocks not to be vaccinated if the breeder so requests and the epidemiological assessment of the flock and the biosafety of the holding does not support vaccination against brucellosis.

Vaccination is carried out in the Norte Region (specifically in Trás-os-Montes), in the Algarve Region, in LVT region, and is also being implemented on some holdings in the Centro Region and Alentejo.

Special vaccination programme in Trás-os-Montes

The interiority characteristics of Trás-os-Montes region favour the breeding of sheep and goats, in contrast to the more typically coastal DSAVRN, as evidenced by the proportions of animals in each (a ratio of 3:1). Its output is very important for the economy of the region and for preventing rural exodus. The eradication of the disease may bring other socio-economic benefits in terms of intra-Community trade, given that most of the region is a border area with Spain.

The production systems are extensive, with widespread grazing on uncultivated land and sometimes landless flocks use exclusively of common pastures.

The vaccine has therefore been valuable in improving the health of flocks by increasing the animals' protective immunity and reducing shedding of the agent into the environment, and has been very important in zootechnical terms in making it possible to preserve the gene pool of indigenous breeds (of which there are several in the region) and to increase their numbers, which in some cases had reached very worrying levels.

The vaccination programme covers 4 Food and Veterinary Divisions (Vila Real e Lamego, Bragança, Chaves- Mirandela e Braga), which together have 34 municipalities. There are 14 OPPs operating in the areaand implementing surveillance, vaccination and follow-up of positive flocks. Maintaining the

pressure of vaccination of young animals in all flocks regardless of their health classification (with the exception of unvaccinated B3/B4 flocks kept under special arrangements), is crucial to the plan to control the disease and must therefore be a priority; it is expected that some 40.250 young animals (3-6 months of age) will be vaccinated in 2016.

Measures applied within the scope of this programme include:

- identification of all ovines and caprines from 3 to 6 months of age by affixing a green ear tag bearing the holding mark and a ruminal bolus or, on small animals, affixing only an electronic green tag;
- vaccination of males and females between 3 and 6 months of age with a full dose of the Rev1 vaccine via the conjunctival route;
- tattooing of vaccinated animals on the left ear or the left inguinal fold;
- restriction of animal transport for at least 21 days after vaccination of young animals;
- registration of each animal's identification number and characteristics, screening and date of vaccination in PISA.net (the Animal Health Computer Programme);
- serolological screening of vaccinated animals from 18 months after vaccination;
- application of appropriate penalties for infringements under Decree-Law No 244/2000 of 27 September 2000.

Special vaccination programme in Lisboa e Vale do Tejo:

Due to the occurrence in 2014-2015 of an outbreak of brucellosis is Setubal and Palmela areas, a special vaccination programme was initiated in 2015 and need to be in place up to 2020.

In infected flocks (B.2.1.) all sheep and goats over 3 months of age, if not vaccinated, are tested and vaccinated. If positive results are found (CFT>=20 IU/ml) the animal is compulsorily slaughtered. All animals vaccinated with 6 months of age or more are tattooed on the left ear or the left inguinal fold. Adult vaccinated animals are tested 24 months after vaccination, with RBT. Positive samples to RBT are tested with CFT. During this period the flocks will be classified as infected and will be under restriction. If in the control all animals are serologically negative, another test is carried out 60 days later and if negative the flock is classified as B2 and follows the current procedure.

During 5 years all replacement animals are vaccinated between 3-6 months of age.

In non-infected flocks (B4, B3, B2) the normal testing and classification regime applies and also the vaccination of all replacement animals between 3-6 months of age, during at least 5 years.

Special vaccination programme in Algarve:

Although progress has been achieved in Algarve, vaccination with the Rev1 by conjunctival route will remain compulsory for all replacement female small ruminants aged between 3 and 6 months in flocks located in the following areas:

- the area covered by the Alcoutim OPP municipality of S. Brás de Alportel, the parishes of Salir, Alte and Boliqueime (belonging to the municipality of Loulé)
- the area covered by the ASCAL OPP municipality of Albufeira, municipality of Silves (except for the parish of S. Marcos da Serra) and the parish of Lagoa (municipality of Lagoa) and the parish of Mexilhoeira Grande (municipality of Portimão).

Close follow up and monitoring of OPPs' implementation of the programme of vaccination with Rev1 will be carried out by DSAVR Algarve.

Measures applied within the scope of this programme include:

- replacement males and females have agreen tag applied to the left ear and a ruminal bolus for

electronic identification;

- taking of blood at the time of vaccination, with slaughter of positive animals;
- vaccination of males and females between 3 and 6 months of age with a full dose of the Rev1 vaccine via the conjunctival route;
- restriction of animal transport for at least 21 days after vaccination;
- testing of vaccinated animals 18 months after vaccination, with slaughter of reactors to RBT and CFT ≥ 20 IU/ml:
- in completely isolated B.4 flocks, the DSAVR Algarve may authorise the non-vaccination of young animals and retain B.4 classification;
- authorisation to restock holdings using only vaccinated animals, or for self-restocking using animals from the holding itself provided that they were vaccinated as young animals, in accordance with the provisions of Art. 4(j) of Decree Law No. 244/2000.

In the event of outbreaks outside the vaccination area, one of the following decisions must be considered:

- complete slaughter of the affected flock;
- vaccination of replacement young animals in the flock in question.

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

(max. 32000 chars):

To avoid the disease spreading between flocks, a series of measures are being taken with the aim of maintaining biosafety standards.

Whenever possible structures must exist which permit animals to be effectively isolated from factors that risk introducing brucellosis infection into the flock (e.g.: fences and/or walls, wheel dips, foot baths, appropriate footwear and clothing, etc.).

It is advised that flocks follow strict rule for entries and departures of animals, with compliance with flock classification restrictions and pre-movement serological testing within 30 days before movements to confirm their disease-free status. Holders of small ruminants are required to electronically identify animals born on their holdings after 1 January 2010 (Regulation EC 21/2004 of 17 December 2003). Older animals must be duly identified in accordance with the legislation in force (one or two eartags).

The entry of persons and other animals will have to be restricted so as to avoid the disease being introduced by that route.

Mixing of flocks in common pastures is also frequent in certain areas and therefore several groups of flocks are considered as the same epidemiological units and restrictive measures applied to all when necessary.

There are also on-line manuals of best practices on livestock holdings describing biosafety standards, produced by producer associations in conjunction with the DGAV.

The quarantine notice also draws holders' attention to the cleaning and disinfection of sheds and annexes, loading areas and places, materials or substances derived from the animals or that may have

been in contact with them, and the containers, utensils and other objects used by the animals. In the course of the epidemiological investigations on farms, holders are asked a series of questions which, in assessing biosafety and management methods, clarify matters for holders and are educational.

## 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, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around infected holding). 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.

#### (max. 32000 chars):

Whenever a flock is considered to be positive or infected, pursuant to the provisions of Decree-Law No 244/2000 of 27 September 2000, the DSAVR will:

- order that the holding be quarantined, and the owner notified, until the DSAVR reaches a decision;
- ban the movement of animals of species susceptible to brucellosis from or to the holding except when the animals are destined for immediate slaughter;
- order the marking of the positive animals and, in certain occasions, of other animals in the same holding destined for compulsory slaughter and the isolation of such animals until they are collected and transported to the slaughterhouse;
- order the collection and transport under official supervision of the animals destined for compulsory slaughter within 30 days following the date of official notification of the owner, with collection of material for laboratory diagnosis, except for animals from an infected flock;
- prepare the processo for the payment of compensation in accordance with the established official criteria;
- subject the remaining animals to a serological test within a period of 30 days following the removal of the last positive animal for slaughter;
- stipulate that the milk from positive animals in infected flocks may only be used for animals on the same holding following appropriate heat treatment in accordance with Regulation (EC) No 853/2004 of 29 April 2004;
- stipulate that the milk from negative animals in infected flocks may not leave the holding unless it undergoes appropriate heat treatment in accordance with Regulation (EC) No 853/2004 of 29 April 2004; order the cleaning and disinfection of the barns, accommodation, equipment and other utensils used
- by the slaughtered animals;
- require the immediate destruction of foetuses, stillborns, placentas and animals that have died, unless they are destined for laboratory analysis;
- require the immediate destruction, by incineration or burial, of the straw, bedding and any other materials or substances that have been in contact with infected animals or placentas, after treatment with officially approved disinfectant solution;

- prohibit the use of manure from infected barns or any other accommodation used by the animals without appropriate treatment;
- carry out an epidemiological survey and investigation of epidemiologically linked holdings;

Animals subject to compulsory slaughter will be sent to the offal processing industry. Slaughter animals from flocks were infection is not yet confirmed are subjected to sample collection for bacteriology.

When Brucella is isolated, epidemiological survey is carried out to establish origin of infection. These surveys are also carried out when there is a suspetion of false positive reactions.

#### Special provisions

In particular situations where the epidemiological survey makes a case for this action, the DSAVR asks the OPPs to include dogs in the testing programmes. Where they show positive results in testing they must, where possible, undergo medical treatment.

In certain epidemiological situations, susceptible (or suspect) animals may be slaughtered, and thus all animals not vaccinated with Rev1 in a flock in which the percentage of animals thus vaccinated is greater than 50% will be slaughtered, leaving only vaccinated animals and the holding may thereafter be permitted to acquire vaccinated animals only. From the date of slaughter of all the unvaccinated animals, the classification of this flock changes to disease-free suspended, pending further rehabilitation.

#### Depopulation of flocks

The use of depopulation (abate total) of outbreaks is laid down in article 12th of Decree-Law 244/2000 of 27 September and referred at point 3 of the template. DGAV may determine this measure based on the risk assessment of specific situations, according to the following criteria:

- When there is no improvement in the health qualification of an infected herd or an epidemiological 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 official veterinary regional services (DSAVR), is always followed with two documents:
- The epidemiological inquiry;
- An expressed commitment of the owner regarding it's compliance with the "waiting period before restocking" and with the expressed conditions for restocking.

Owners are committed to perform cleaning and disinfection of holdings and equipment, in accordance with the instructions of DSAVR after depopulation and before the entry of new animals. These procedures are supervised by the OPP and validated by the DSAVR. Pastures used by infected animals will not be used before for 60, or 30 days according to weather conditions (winter or summer respectively) however, it is advised that the waiting period should not be less than 180 days. Procedures applied to small ruminants are the same as bovines, as the legislation is common to both species with regards to brucellosis, therefore guidelines named as «Manual de apoio às estratégias de controlo da brucelose bovina», published at DGAV website (please see "procedimentos de trabalho PT/BB07 – serologia positiva/suspeita de infeção/abate total do efetivo"):

http://www.dgv.min-agricultura.pt/portal/page/portal/DGV/genericos?generico=574916&cboui=574916

The expenditure relating to total slaughter referred to at 8(5) includes:

- slaughter;
- average value per km from the holding to the slaughterhouse(s);
- the cost of disposing of carcasses;
- cleaning and disinfection of vehicles.

In situations of depopulation, farms remained without animals for a minimum period of 6 months up to a maximum term to be determined by the DSAVR.

#### Restocking

A protocol will be agreed between the DSAVR and the producer, setting out the rules for restocking and the health procedures to be followed after all of the animals have been slaughtered.

Before the introduction of the new flock, the barn or other accommodation, equipment and utensils which may have been in contact with the slaughtered animals must be thoroughly cleaned and disinfected.

The holding must be restocked with animals from free or officially free flocks, following performance of the pre-movement test if the animals have not been vaccinated with Rev1.

This restocking must be carried out with vaccinated animals whenever they do not have their own properly isolated pastures and there are infected flocks in the epidemiological unit concerned, or if the DSAVR so decides. This practice is compulsory in Trás-os-Montes.

After restocking, the flock will be classified as free, if such restocking has been carried out with vaccinated animals from holdings with free status, or officially free status if the new animals come from an officially free holding, provided that they are accompanied by a movement certificate and a veterinary health certificate proving that the pre-movement tests have been carried out.

#### Other measures

The pastures where infected animals have been kept may not be used for 180 days.

The cleaning and disinfection of means of transport after animals from an infected holding have been loaded are undertaken with officially approved disinfectants in line with the codes of good practice defined in the manual of procedures for authorisation to operate means of cleaning and disinfecting of transport for carrying live animals.

Holdings will be disinfected by their owners, under the technical supervision of the OPP. In the event of depopulation, the (initial and final) disinfection of the holding and the equipment will be the responsibility of the owner, who will first clean them by washing and removing all material, feed and manure, with technical support from the OPP and under DSAVR supervision.

### 4.4.10 Compensation scheme for owners of slaughtered and killed animals

#### (max. 32000 chars):

The existing compensation scheme in Portugal comes under Group 3, in which farmers receive financial compensation of 100% of the value of the animals, paid by the State, with 50% reimbursement by the European Union.

The compensation granted in respect of ovine and caprine animals in Portugal is governed by Order No 205/2000 of 5 April 2005 and is laid down in Joint Order No 530/2000 of 16 May 2000, of the Minister of Finance and the Minister for Agriculture, Rural Development and Fisheries:

- A base value of 40% of the value quoted in the weekly bulletin issued by the Office of Planning and Policies (GPP) of the Ministry of Agriculture, Rural Development and Fisheries, for the purposes of payment of compensation for slaughter on health grounds;
- An additional compensatory amount based on the health classification of the flock percentage value of the rate in the weekly bulletin issued by the GPP: B3 and B4 flocks 50%; other 25%. The 25% additional compensatory amount referred above will be withdrawn if there has been no improvement in the health classification after 12 months.
- A restocking grant of EUR 29.93 per animal acquired up to 12 months after the compulsory slaughter of the positive animals, limited to the number of animals slaughtered. The DSAVR for the holding of origin must certify that they are from B3 and B4 flocks and that the legislation in force on the conditions governing the entry of animals into flocks has been observed;
- A self-restocking grant of EUR 14.96, limited to the number of animals slaughtered over the 12 months following compulsory slaughter and provided that the legislation in force has been observed;
- A depopulation grant of EUR 9.98 per animal over 12 months of age present on the holding on the date of the decision to slaughter all animals.

Before compensation for compulsory slaughter is paid out the relevant DSAVR must check that the owner of the slaughtered animals has complied with the legal provisions relating to the eradication programmes and animal movement and the specific animal health measures imposed in the notification.

If the aforementioned check reveals evidence of non-compliance by the breeder, the DSAVR must immediately initiate the relevant countermanding process, and payment of compensation will depend on the final decision in the case.

The compensation procedures must include a declaration issued by the DSAVR of compliance by the owner of the slaughtered animals with the legal provisions relating to the eradication programmes, animal movement and any specific animal health measures imposed in the notification.

Without prejudice to other legal penalties, compensation for compulsory slaughter on health grounds may not be granted if there is proof of fraud or failure to comply with the legislation in force.

In the case of ovine and caprine animals, the amount of the compensation is directly related to the current market values of these species, and a maximum rate of 40% of this amount is used as the base compensation value.

Small ruminants subject to compulsory slaughter for public health reasons are sent to the offal processing industry.

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

#### (max. 32000 chars):

In monitoring the implementation of the rules of the programme the DGAVs develop supervisory and control measures at various levels, and diagnosis in live animals and the withdrawal of positive animals (slaughter on health grounds) have been defined as decisive risk factors for the status of flocks and reduction of levels of infection. Accordingly, an «Integrated Multi-Annual National Control Plan 2015-2017 » for bovine tuberculosis, bovine brucellosis and sheep and goat brucellosis, prepared in accordance with Regulation (EC) No 882/2004 of the European Parliament and of the Council is being implemented, which includes the specific measures concerning Brucellosis in Small Ruminants.

The different bodies intervening in the programme have well defined profiles in PISA.Net, and their entries on the database make for systematic assessment and monitoring of the measures taken by the DSAVRs. The definition of the information circuits and respective destinations also controls and standardises the quality of the information produced.

The DSAVRs also carry out inspection to the OPPs, selecting those recording the highest number of holdings testing positive for Brucellosis in small ruminants, unfavourable developments (prevalence rate) and/or an increase in the number of positive holdings (incidence rate) in each DSAVR's area, and other inspection visits may be made when instances of non-compliance are detected. The OPP are therefore controlled by DSAVR,

- (1) at the beginning of each programme, when the proposal is analysed to verify if it contains all associated farmers,
  - (2) during the implementation of the programme through:
- (a) the monitoring of the samples sent to the laboratories and the data inserted in PISA.net database;
  - (b) official controls to some OPP, including checks to their field work; and
  - (3) the final detailed verification and evaluation of the work carried out by each OPP.

The local veterinary services are checked and supervised at central and regional level through the monitoring of PISA.net data, and working meetings to evaluate the progress of the programme.

Supervisory measures are taken following data searches on PISA.Net to check the time taken to slaughter positive animals on health grounds and concern the total culls on health grounds carried out during the period under review (12 months prior to the date of the data search) on holdings selected from the list of flocks of small ruminants infected with Brucellosis.

A report containing the overall assessment and any instances of non-compliance detected is drawn up.

Special control teams also undertake systematic checks on 3% of holdings including at least 5% of the animals to check proper identification of animals, the stock books and communications to the database.

### 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.

In relation to the number of humans cases reported in the previous years, there was a steady decrease of notified cases untill 2013 – 35 cases. Unfortunately in 2014, 52 cases were reported due to a human outbreak related to house made fresh cheese consumption from a flock that was latter identified as positive and subjected to qualification.

Overall according to results from previous years, namely the reduction of disease parameters such as incidence and prevalence it can be considered that progress has been achieved.

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 tend to increase productivity (raising the revenew to farmers) and avoid costs inherent to the programme and related to trading constraints.

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 flocks, 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.

For these reasons, investment in a programme such as this is extremely positive, even if it is difficult to quantify.

The costs of this plan are presented at point 8 and are based on the prices currently in force, which may change in 2016.

### 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: **2016**

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests	
DSAVR - North (N)	RBT	Sheep and goat	serum	Eradication	460 000	X
N	FCT	Sheep and goat	serum	Eradication	158 000	X
N	Bacterilogy	Sheep and goat	organs, lymph nodes	Eradication	750	Х
DSAVR - Center (C)	RBT	Sheep and goat	serum	Eradication	442 500	Х
С	FCT	Sheep and goat	serum	Eradication	32 500	Х
С	Bacterilogy	Sheep and goat	organs, lymph nodes	Eradication	125	Х
DSAVR - Lisboa e Vale do Tejo (LVT)	RBT	Sheep and goat	serum	Eradication	161 000	X

				Add a new r	ow	
		7		Total	2 017 150	
ALG	Bacteriology	Sheep and goat	organs, lymph nodes	Eradication	50	X
ALG	FCT	Sheep and goat	serum	Eradication	12 000	X
DSAVR - Algarve (ALG)	RBT	Sheep and goat	serum	Eradication	61 800	X
ALT	Bacteriology	Sheep and goat	organs, lymph nodes	Eradication	100	X
ALT	FCT	Sheep and goat	serum	Eradication	73 000	X
DSAVR - Alentejo (ALT)	RBT	Sheep and goat	serum	Eradication	577 000	X
LVT	Bacteriology	Sheep and goat	organs, lymph nodes	Eradication	125	X
LVT	FCT	Sheep and goat	serum	Eradication	38 200	X

### 7.1.2 Targets on testing herds and animals

### 7.1.2.1 Targets on testing herds

7.1.2.1 Targets on the testing of herds for year: **2016** 

										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	
DSAVR - North (N)	Sheep and goat	16 743	16 743	16 500	250	150	20	8	98,55	1,52	0,91	X
DSAVR - Center (C)	Sheep and goat	27 959	27 959	27 930	30	25	3	10	99,9	0,11	0,09	Х
DSAVR - Lisboa e Vale	Sheep and goat	7 106	7 106	7 000	40	25	5	12,5	98,51	0,57	0,36	Х
DSAVR - Alentejo (ALT)	Sheep and goat	7 926	7 926	7 800	35	20	1	2,86	98,41	0,45	0,26	Х
DSAVR - Algarve (ALG)	Sheep and goat	1 224	1 224	1 222	20	10	1	5	99,84	1,64	0,82	Х
Total		60 958	60 958	60 452	375	230	30	8	99,17	0,62	0,38	
								Add a new row				

### 7.1.2.2 Targets on testing animals

### 7.1.2.2 Targets on the testing of animals for year:

							Slaugl	ntering	Target i	ndicators	
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 - North (N)	Sheep and goat	420 000	420 000	412 000	397 000	1 200	1 200	2 200	98,1	0,29	X
DSAVR - Center (C)	Sheep and goat	552 000	552 000	535 000	413 500	60	60	120	96,92	0,01	X
DSAVR - Lisboa e Vale do Tejo	Sheep and goat	185 000	185 000	176 000	150 500	800	800	1 000	95,14	0,45	X
DSAVR - Alentejo (ALT)	Sheep and goat	1 065 000	1 065 000	1 012 000	539 300	80	80	200	95,02	0,01	X
DSAVR - Algarve (ALG)	Sheep and goat	60 000	60 000	58 200	57 700	50	50	100	97	0,09	X
Total		2 282 000	2 282 000	2 193 200	1 558 000	2 190	2 190	3 620	96,11	0,1	
							Add a new row				

### 7.2 Targets on qualification of herds and animals

Targets on qualification of herds and animals

### 7.2 Targets on qualification of herds and animals for year: 2016

							Targets	s on the statu	s of herds a	nd animals ur	der the progr	amme				
					Expected not free or not free from disease											
		Total numb and animals progra		Expected	unknown	Last chec	k positive	Last check	k negative	Expected free from dis	ease status	Expected dise			fficially free isease	
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
DSAVR - North (N)	Sheep and goat	16 743	420 000	0	0	50	6 000	200	24 000	300	15 900	4 900	245 000	11 293	129 100	X
DSAVR - Center (C)	Sheep and goat	27 959	552 000	0	0	2	200	28	2 800	250	5 000	500	47 500	27 179	496 500	X
DSAVR - Lisboa e Va	Sheep and goat	7 106	185 000	0	0	15	600	25	1 000	300	8 000	200	3 200	6 566	172 200	X
DSAVR - Alentejo (Al		7 926	1 065 000	0	0	3	400	32	4 300	250	3 500	700	119 000	6 941	937 800	X
DSAVR - Algarve (AL	Sheep and goat	1 224	60 000	0	0	5	500	15	1 500	65	3 250	500	19 500	639	35 250	X
Total		60 958	2 282 000	0	0	75	7 700	300	33 600	1 165	35 650	6 800	434 200	52 618	1 770 850	
					Add a new row											

### 7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment for year: **2016** 

					Та	rgets on vaccination	or treatment program	me		
Region	Animal species	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 treatmentexpected to be administered	Number of adults expected to be vaccinated	Number of young animals expected to be vaccinated	
DSAVR - North (N)	sheep and goats	5 200	260 000	5 200	3 500	40 250	42 000	0	40 250	X
DSAVR - Center (C)	sheep and goats	327	27 650	327	327	5 530	6 600	0	5 530	X
DSAVR - LVT	sheep and goats	200	11 000	200	200	2 200	2 500	0	2 200	X
DSAVR - Algarve (ALG)	sheep and goats	220	5 600	220	220	850	1 020	0	850	X
Total		5 947	304 250	5 947	4 247	48 830	52 120	0	48 830	
				Add a new row						

7.3.2 Targets on vaccination or treatment of wildlife

7.3.2 Targets on vaccination or treatment of wildlife for year: **2016** 

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	
Not aplicable	0	0	0	0	X
Total		0		0	
			Add a n	ew row	

### 8. Detailed analysis of the cost of the programme

### 8.1 Costs of the planned activities for year:

2016

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.

1. Testing							
Cost related to	<u>Specification</u>	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Cost of analysis	Rose bengal test	Individual animal sample/test	1 702 300	0.5	851 150	yes	X
Cost of analysis	Complement fixation test	Individual animal sample/test	313 700	0.78	244 686	yes	X
Cost of analysis	Bacterial culture	Individual animal sample/test	1 150	20	23000	yes	X
Cost of sampling	Domestic animals sampled	Individual animal sample/test	1 558 000	0.55	856 900	yes	X
					Add a new	row	
2. Vaccines							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Purchase of vaccine/treatment ofanimal produc	Vaccination Rev-1	Vaccine dose	52 120	1	52120	yes	X

					Add a new	row	
3. Compensation paid to owne	ers						
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Animals	Slaughtering/culling with salvage value	Animal 3 6		100	362,000	yes	Х
					Add a new	row	
4. Cleaning and disinfection							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested	
					Add a new	row	
5. Slaughtering/culling costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Slaughtering/culling costs	Slaughtering cost	Animal	220	23	5060	yes	X
					Add a new	row	
6.Other costs							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
					Add a new	row	
	Total				2 394 916,00 €		

### 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 reimbursment/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 perform 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):

a) 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 DGAV.

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) 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 cofinanced by the European Commission.

- 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) Compensation to owners is paid by a public Institute - IFAP (Financing Institute for Agriculture and Fisheries) at central level of the state veterinary services and cofinanced by the European Commission.

- 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) Vaccine is purchased by DGAV and handed over to the OPP (OPP don't pay for the vaccines).

Vaccination action is paid to the OPP by DGAV and the owner of the animal

It is cofinanced by the European Commission.

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

#### (max. 32000 chars):

e) Other essentials 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.

Other measures included 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.

### 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

		C 11	the second second	C		_	100 (100)		1.0	The second secon
Standard	requirements f	ror the su	nmission c	it nrac	iramme	tor	eradication	CONTROL	and	monitoring
otariaar a	i oquii orriorito i	ioi tiio sa		' P' US	J. a		or a aroa trorry		arra	11101111011119

	3.	Source	of	funding	of	eligible	measure
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All eligible measures for which cofinancing is requested and reimbursment will be claimed are financed by public funds.

$\boxtimes y$	es
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 $\square$ no

#### **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 <u>SEVERAL MINUTES TO UPLOAD</u> 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
		7177_4504.pdf	7177_4504.pdf	266 kb
		7177_4505.pdf	7177_4505.pdf 7177_4505.pdf	
		7177_4506.pdf	7177_4506.pdf	101 kb
			Total size of attachments :	762 kb