



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit G5 - Veterinary Programmes

**SANCO/10854/2012**

*Programmes for the eradication, control and monitoring of certain  
animal diseases and zoonoses*

**Eradication programme for Sheep and Goat  
Brucellosis (B. Melitensis)**

**Approved\* for 2012 by Commission Decision 2011/807/EU**

**Greece**

\* in accordance with Council Decision 2009/470/EC



HELLENIC REPUBLIC  
MINISTRY OF RURAL DEVELOPMENT & FOOD  
GENERAL VETERINARY DIRECTORATE  
ANIMAL HEALTH DIRECTORATE  
DEPARTMENT OF ZOOSES

Mail Address: 2 Acharnon st.  
101 76 Athens  
GREECE

Phone: + 30 210 212 57 26-25

Fax: + 30 210 825 26 14

E-mail: [Ka6u013@minagric.gr](mailto:Ka6u013@minagric.gr)

**OVINE AND CAPRINE BRUCELLOSIS CONTROL AND  
ERADICATION PROGRAMME  
FOR THE YEAR 2012**

**FOR CO –FINANCED APPROVAL BY THE COMMUNITY**

**GREECE**

## **1. Identification of the programme**

Member State : **GREECE**

Disease: ***Ovine and Caprine Brucellosis Control and Eradication Programme***

Request of co –financing for: **2012**

***Reference No of the document: 132848/18.04.2011***

Contact name (main):

**Dimitris Vourvidis**

Phone : + 30 210 212 57 26

Fax : + 30 210 8252614

e-mail: [Ka6u013@minagric.gr](mailto:Ka6u013@minagric.gr)

Department of Zoonoses

Animal Health Directorate

General Veterinary Directorate

Ministry of Rural Development and Food

Contact names (other):

**Spyros Doudounakis (Animal Health Director)**

Phone : + 30 210 8836420

Fax : + 30 210 8252614

e-mail: [vetserv@ath.forthnet.gr](mailto:vetserv@ath.forthnet.gr)

Programme Data Sets sent to the Commission: **19.04.2011**

## **2. Historical data on the epidemiological evolution of the Disease**

### **2.1 CURRENT EPIDEMIOLOGICAL SITUATION**

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#### **2.1 EPIDEMIOLOGICAL SITUATION IN THE MAINLAND**

Greece is divided in 54 prefectures called Nomos. For the implementation of ovine and caprine brucellosis control and eradication programme the whole country is divided in two parts. At the part 1 (mainland), a *B. melitensis* control programme is implemented based on mass vaccination and at the part two ( islands) a *B. melitensis* eradication programme is implemented based on test and slaughter policy for infected ruminants.

The white areas in the MAP I of ANNEX I (word file attached: *MAPS BMP2012*) are the sections of the country in which an eradication program based on test and slaughter policy will be implemented.

The grey areas represent the regions where the *Brucella melitensis* control programme will be implemented based on mass vaccination of young and adult animals.

In ANNEX I (*past file attached: ANNEXI&II2005Rev1*) Table 1 presents the epidemiological situation in all the prefectures of the country at the end of the year 1998, which was the

initial start of the five -year term program. Tables 2,3,4,5 and 6 are also included in the annex and present the number of animals vaccinated in each prefecture from 1997 up to 31-12 -2003. For the year 2004 and 2005, the *Annexes 1 ( past file attached: Results BMEL 2004R1.xls and the new file attached: Results BMEL 2005.xls)* present the mass vaccination follow-up data from the Hellenic Regions (Nomos) in the mainland. The 2004 and 2005 epidemiological data regarding the Bovine Vaccination programme under the B. melitensis control programme with Rev 1 vaccine are presented in the specified excel sheets of the attached past files: *Results BMEL2004R1.xls and Results BMEL 2005.xls* respectively. The reported results of the 2007 and 2008 Programme vaccination in semi – wild bovines can be found in the attached excel files <Vaccination Data 07 & Targets 09 BM SG.xls > and < Vaccination Data 08 & Targets 2010 BM SG.xls respectively. Vaccination data for the Reporting Year 2009 had been sent to the Commission based on ANNEX 1 of C.D 2008/425/EC via the attached EXCEL file” BM REV1 VACCINATION DATA 09”. Detailed analysis of 2010 summary vaccination data records can be found in the **excel sheet No 1** of the attached excel file “ **PROG2012BMELSGGR.xls**”

## **2.2 EPIDEMIOLOGICAL SITUATION IN THE ISLANDS**

In the islands (eradication zone), except Evia, Ieros and Lesbos, the 2010 reported B.melitensis flock incidence (2,04%) in sheep and goats tested (*generated based on the data submitted to the Central authorities by the prefecture veterinary directorates*) was higher compared to 2009 (0,28%) and 2008 (1,80 %) respectively. In addition the 2010 reported flock prevalence (6,12%) from a low non representative number of tested flocks, increased significantly in comparison with 2009 prevalence rate (3,36%).

The results of implementation of the eradication programme for the years, 1998 -2003, as well as the epidemiological situation of the flocks and bovine herds under the REV 1 vaccination programme are presented in Tables 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 of Annex I (*past file attached: ANNEXI&II2005Rev1*). For the year 2004, Tables 1 and 2 (*past file attached: EPROGMEL04.doc*) comprise data from the eradication zone. For the Reporting years 2005 and 2006, analytical records and relevant epidemiological and statistical descriptive data (*Eradication test results, flock and animal prevalence rates, epidemiological situation according to the animal health status required by the programme implementation on the eradication zone*) are presented in the attached file sheets of previous submitted in the Commission Reports (*file names: BM OC ERADICATION PR 2005.xls and ERADICATION EPIDEMIOLOGY 2006.XLS/ Historical data folder*).

For the Reporting year 2007, Data sets and relevant epidemiological and statistical records can be found in the previously attached excel file for Brucella eradication programme implemented in 2007 ( ERADICATION SG BM 2007.XLS ).

For the Reporting year 2008, Data and relevant epidemiological statistics can be found in the attached excel file for Brucella eradication programme implemented in 2008 (ERADICATION SG BM 2008.XLS ).

For the Reporting year 2009, Summary Data and relevant epidemiological statistics can be found in the attached excel file for Brucella eradication programme implemented in 2009 (ERADICATION SG 2009.XLS ).

For the Reporting year **2010**, Summary Data and relevant epidemiological statistics can be found in the **excel sheet No 5** of the attached excel file “ **PROG2012BMELSGGR.xls**”.

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### **2.3 BRUCELLOSIS IN HUMANS – Public Health Significance**

Based on Reported human Brucella incidence data from the Hellenic public health authorities the reported cases in humans were 548, 405, 331, 239, 233, 337, 287, 151, 346 and 114 (2009) for the reference years 2000 – 2009 respectively. **In 2010** the official *Brucella* reported human cases were **97** (source: *Hellenic Center for Disease Control and Prevention supervised by the Greek Ministry of Health*). These results indicate epidemiological variations of the infection rate and significant decreasing trends of human brucellosis cases in Greece over time. The significant increase of Brucella cases in 2008 (346) was due to an outbreak occurred in the island of Thasos. The reported cause of this foodborne outbreak was the consumption of local dairy products made of unpasteurized milk.

Related retrospective data presented in Diagram 1 of ANNEX I (previous Historical files submitted to the Commission), conclude that, the incidence of Human brucellosis has been decreasing the last years in parallel line with the implementation of the sheep and goat vaccination programme.

## **3. DESCRIPTION OF THE SUBMITTED PROGRAMME**

### **INTRODUCTION**

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Brucellosis due to *B. melitensis* is a serious zoonoses, sometimes fatal, and the rural population especially persons that are in close contact with animals are in potential risk getting the disease. Brucellosis is also a significant disease that causes significant economical losses in sheep and goat farming due to abortions and quality degradation of animal products as well as reduction in milk production.

In Greece, since 1-1-1999, the Veterinary Service of the Ministry of Rural Development and Food has run a control and eradication program. Different strategies for the control and eradication of brucellosis have been chosen in the mainland and in the islands. In the mainland, where the prevalence of brucellosis in sheep and goat flocks is high, transhumance of the flocks is a practice; emergency mass vaccination of lambs, kids and adult animals has been decided as the first step of the control of brucellosis. The aim of this action is the effort of decreasing the high incidence and prevalence of the disease in the mainland.

In the islands, where the disease is at low prevalence among sheep and goat flocks, all the permitted factors are in favor to implement a test and slaughter policy for the eradication of brucellosis.

Following the evaluation of the current situation and taking into consideration: a) the ovine and caprine brucellosis is a zoonotic disease of major public health impact on the Community b) the observed dynamics of inter community market of live animals, meat, milk and animal products c) the increase of animal production and d) the significant risk of young animals, especially the female replacement animal stock to get infected, the Greek Veterinary authorities are obliged to intensively continue the same uniform policy for the year 2012 (for the two specified sections of the country-mainland and islands) on a more systematic and efficient manner compared to previous years of programme implementation.

So far, the recommendations of the Task Force Subgroup have been taken in consideration and actions for their implementation have been planned. In the islands the implementation of the eradication program will be enforced based on the available resources during 2012,

so most of the sheep and goat flocks in these areas should be tested at least once. However the officially free health status has strictly recommended to be suspended for the flocks that the routine testing frequency is not fulfilled. Additionally, a significant occurrence of the disease has appeared in the recent past years in the islands of Lesbos and Leros respectively. Based on test and slaughter policy, eradication of the disease would not be efficient for these two island and mass vaccination was decided to be implemented in the years 2008 - 2011 and to be continued in 2012 as well.

In the mainland the emergency mass vaccination of young and adult animals will be continued and enhanced to increase and finalize the vaccination coverage of the existing non vaccinated flocks. As an additional measure in some prefectures, the wild bovines grazing in common pastures with sheep and goat flocks will be vaccinated too.

#### **LEGAL BASIS. MEASURES AND TERMS OF LEGISLATION UNDER THE PROGRAMME**

The legal basis of the programme is:

1. Directive 91/68 EEC
2. Council's Decision 90/424 EEC
3. Council's Decision 90/242
4. Presidential Decree 133/1992
5. Regulations EC 853/2004 and 854/2004
6. Regulations EC 21/2004
7. Presidential Decree 242/2005
8. Commission Decision 2008/425/EC
9. Ministerial Decision **258735/17.07.2007** and the relevant amendment of of national Decision for the programme implementation (**258963/29.08.2008**).

#### **AUTHORITIES RESPONSIBLE FOR THE CO-ORDINATION AND IMPLEMENTATION OF BRUCELLOSIS PROGRAMME**

The authority, which is responsible for the co-ordination and control of small ruminant's brucellosis eradication programme in whole country, is the Department of Zoonoses in the Directorate of Animal Health in the Central Veterinary Service of the Ministry of Rural Development and Food.

The Department of Zoonoses is responsible for the co-ordination and control of all District Veterinary Services involved in the implementation of the programme. This department collects the data, provides statistical analysis, evaluates the implementation of the program and informs the relevant authorities in the European Union about the progress of the programme.

It has also the responsibility to issue Ministerial Orders for the implementation of the programme, as well as the bi-ministerial order determining the terms and the amount of compensation.

A committee for the co-ordination, monitoring and evaluation of Brucellosis control and eradication programme has been established in the Central Veterinary Service since 1996. The committee assists the Department of Zoonoses in the co-ordination, implementation, monitoring and evaluation of the programme.

The committee is constituted by:

- 1) The Director of Animal Health Directorate in the Ministry of Rural Development and Food who will act as President.
- 2) The Head of the Department of Zoonoses in the Ministry of Rural Development and Food who will act as Vice - President.
- 3) A senior veterinary officer of the Department of Zoonoses in the Ministry of Rural Development and Food who will be a member.
- 4) An epidemiologist appointed by the Central Veterinary Service of the Ministry of Rural Development and Food who will be the technical advisor of the committee.
- 5) The Director or the Head of Animal Health department of the Directorate of Inspections and Controls in the Ministry of Rural Development and Food.
- 6) A Veterinary officer who is responsible for the Animal Registration and Identification system in the Ministry of Rural Development and Food.

The committee will meet at least once a year in order to evaluate the progress of the programme in each prefecture and in the whole country.

In case that the targets set in advance in a prefecture were not achieved, the committee will evaluate the situation, will take corrective measures and will make an action plan for the targets to be achieved.

In such a case in the committee will participate also:

- 1) The District Veterinary officer of each district -prefecture (Nomos)
- 2) The Head of Animal Health department of each district -prefecture. (Nomos)
- 3) The Director and the Head of Microbiology Department of the Regional Veterinary Laboratory of the area.

## **AUTHORITIES FOR THE IMPLEMENTATION OF THE PROGRAMME**

The District Veterinary Service in each prefecture is responsible for the co-ordination of Field Veterinary Services in the district. It collects data referring to the implementation of the programme in the district and informs the Department of Zoonoses in the Central Veterinary Service.

Field Veterinary Services are responsible for a) the implementation of the programme, b) the identification and registration of the animals, c) the identification of infected animals d)

the issuing of the relevant movement certificates of animals for the slaughterhouses and transhumance of the flocks and e) the disinfection of premises.

### **REFERENCE LABORATORY FOR BRUCELLA**

The National Reference Laboratory for brucellosis has the responsibility for the co-ordination of other state laboratories and the harmonization of the tests performed for the diagnosis of brucellosis. For this purpose, the reference laboratory conducts ring tests among regional laboratories. The reference laboratory is also responsible for the purchase, quality control and distribution of all the necessary reagents.

The reference laboratory organises training meetings with the personnel of the other laboratories in order to improve and update laboratory techniques in the field of brucellosis diagnosis.

The National Reference Laboratory for Brucellosis will participate in the Network of Brucellosis Reference Laboratories of the Member States, as well as in the ring trials conducted by the EU Reference Laboratory for Brucellosis.

The National Reference Laboratory for Brucellosis has also the responsibility of implementing and evaluating new diagnostic tests for the diagnosis of brucellosis in small ruminants and in bovines.

### **REGISTRATION OF FLOCKS AND IDENTIFICATION OF ANIMALS**

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- All sheep and goat flocks must be registered in the Local (Field) Veterinary Service (F.V.S) of the area and a yellow ear tag must identify the animals used for reproduction in a flock. The number on the ear tag is consisted by two letters corresponding to the country's name, two digits indicating the prefecture (Nomos), two digits indicating the code number of the flock, and six digits representing the registered number of the animal.
- The vaccinated animals will be marked with the same ear tag and with a tattoo in order to be recognisable from the non vaccinated animals.
- The registration of the flocks and identification of the animals is compulsory.
- A flock record will be kept by the farmer, in which all the animals are registered every year. A copy of this record must be kept in the F.V.S. of the area.

### **MOVEMENT OF ANIMALS**

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- The movement of sheep and goat flocks or a single animal is prohibited unless an official Veterinary Certificate issued by the F.V.S of the area accompanies them.
- For the flocks reared in the islands, the health status of the flock of origin must be mentioned in the certificate, as well as the purpose of movement and the final destination.



- For the flocks reared in the mainland the vaccination status of the flock or the animal must be mentioned in the certificate.
- A copy of this certificate must be sent officially to the F.V.S of destination so the arrival of the flock or the single animal can be verified.
- The rules for intra and extra district transhumance are the following:
  - Transhumance of a flock is permitted by the F.V.S. of the departure area that issues a relevant certificate. The certificate must be stamped in the area of arrival by the F.V.S. In the islands the certificate must indicate the health status of the flock and in the mainland the status due to vaccination.
- In the islands sheep and goat flocks grazing in common pastures must be of the same health status and should not come in contact with flocks of lower or unknown health status.
- The vaccinated flocks may move for transhumance and should come in contact only with vaccinated flocks.
- The movement of live animals from the mainland to the islands, where eradication program is implemented, is prohibited.

#### **GEOGRAPHICAL AREA OF THE IMPLEMENTATION OF B. MELITENSIS CONTROL AND ERADICATION PROGRAMME**

The programme will be implemented all over Greece, in the mainland and the islands. Different measures will be implemented in each district of Greece. The white area (**MAP I / ANNEX I**) indicates the eradication zone (test and slaughter policy) and the grey area the control programme ( zone of mass vaccination of young and adult animals ).

The grey areas on **MAP II /ANNEX I**, indicate the prefectures in which Bovine vaccination is carried out using REV-1 vaccine. The majority of these free-range (semi-wild) bovines are reared close to sheep and goats in common pastures. This action is an additional measure to control the spread of brucellosis in high-risk mainland areas.

#### **4. MEASURES OF THE SUBMITTED PROGRAMME**

##### **DURATION OF THE PROGRAMME**

The control and eradication programme for brucellosis in ovine and caprine flocks will be implemented under the supervision of the Greek Veterinary services on annual basis. The overall duration of the programme depends on the disease prevalence reduction in the coming year (2012) and mainly on the effectiveness of the programme in conjunction with the available human and financial resources and the valuable contribution of the accredited veterinarians when their status and tasks approved based on the provisions of a new Presidential Decree to be issued.

**The year of implementation: 2012**

√ **Control (mainland plus 3 islands)**

- Testing (Periodic testing in male animals as indicators)
- Slaughter of animals tested positive
- Killing of animals tested positive
- Vaccination**
- Treatment
- Disposal of products

√ **Eradication (Islands )**

- Testing
- Slaughter of animals tested p**
- Killing of animals tested p
- Extended slaughter or killing
- Disposal of products

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### **MEASURES FOR THE BRUCELLOSIS CONTROL PROGRAMME**

- In areas that the prevalence of the disease is high and the flocks are not easily accessed, due to their geographical distribution or transhumance during the summer months, an emergency mass vaccination of young and adult animals is applied.
- Only female animals are vaccinated. The adult animals are vaccinated the last month of pregnancy, in lactating period and in per mating period. There is priority in the vaccination of adult animals in infected flocks, in flocks of unknown health status and in flocks moving for transhumance.
- In the areas where the emergency vaccination of adult animals will be implemented the officially free flocks can be excluded from the vaccination.
- The Local Veterinary Services will take all the measures to prevent contact of the disease with these flocks.
- This measure aims at the reduction of the incidence of abortions due to brucella in a short time, in order to prevent the contamination of the environment, as well as to increase the animals resistance that are in high risk due to the contact with the infectious agent. It is expected that the emergency vaccination of adults in these flocks will influence the incidence of brucellosis in humans dramatically in a very short time.
- In this area the young female animals, which are kept for reproduction, will be vaccinated at the age of 3 - 6 months. It is estimated that young animals represent 15 % of the animals in each flock.
- The vaccination of male animals is prohibited.
- Taking into account the type of husbandry in the mainland of Greece, the traditions and habits of the consumers, that affect the number of replacements and the movement of flocks to the mountains after the 15th of May, there is a very limited time for the vaccination of a large number of young animals. Under these circumstances the Greek Veterinary Service concentrates to the vaccination of the majority of young animals. However, under ideal conditions, no more than 70 % of animals kept for reproduction can be vaccinated.

- The vaccination will be carried out with the REV-1 vaccine, administered by conjunctival route at a dose of  $1 \times 10^9$  C.F.U.
- The vaccinated animals will be permanently marked with a tattoo in order to be recognisable in the future. The tattoo will be consisted of **V** (for vaccination) and the last two digits of the year of vaccination. For the year **2012** the tattoo will be **V12**.
- After the vaccination, the veterinarian responsible for the program will issue a certificate in two copies. The farmer will keep one copy and the other will remain in the F.V.S. In the certificate the number and age of vaccinated animals as well as the date of vaccination must be reported.
- After the completion of vaccination in an area, a serological survey will be conducted for the assessment of vaccination coverage of the animals. The survey will be based on a two-stage cluster sample of flocks and animals. In each area a random sample of 15% of the flocks would be drawn and from the selected flocks a random sample of 20 % of vaccinated animals will be tested.
- In vaccinated flocks all male animals will be tested periodically and the seropositives will be slaughtered.

#### **ADDITIONAL MEASURES FOR THE CONTROL OF BRUCELLOSIS DUE TO B. MELITENSIS**

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In Greece in some areas there is a number of bovines kept only for meat production grazing on mountains in close contact with sheep and goat flocks.

Recently, in some prefectures the prevalence of brucellosis in these herds has been increased. Under the rearing conditions of these animals, the measures foreseen in the legislation for brucellosis eradication can not be implemented. These animals are in close contact in the pasture with ovines and caprines and move for transhumance for a long period of time, in areas that cannot be reached by veterinarians.

By an epidemiological survey carried out in these herds included microbiological cultures of infected material, isolation of *B. melitensis* biovars 1, 2 and 3, typed in O.I.E Reference Laboratory for Brucellosis in Waybridge, United Kingdom were recorded.

Taking into account this situation and the fact that the measures for the control and eradication of the disease, as these are mentioned in Council's Directive 91/68, must be implemented in all the animal species susceptible to brucellosis, bovines of the age of 2 month and above reared in herds with close contact to sheep and goat flocks must be vaccinated with REV-1 vaccine in some prefectures.

According to the current knowledge and the bibliography REV-1 vaccine has been proved superior than S-19 for protecting cattle from brucellosis, especially infected by *B. melitensis*.

The prefectures in which bovine animals will be vaccinated in 2012 cover the shadow area as presented in **MAP II** of **ANNEX I**.

It must be pointed out that the vaccination will be implemented only in a restricted number of bovine herds, which are in close contact with sheep and goat flocks during transhumance. Also all the relevant measures will be adopted for the vaccinated animals not to come in contact or

enter in herds where vaccination is not implemented. Vaccinated bovine animals can be moved to prefectures that vaccination of bovines is not implemented only for immediate slaughtering.

The vaccination of bovines will not interfere with the implementation of bovine brucellosis eradication program, which will be continued based on test and slaughter policy.

The vaccinated bovine animals will be permanently marked with a tattoo in the right ear. The tattoo will be consisted of **V** (for vaccination) and the last two digits of the year of vaccination. For the year **2012** the tattoo will be **V12**. The date of vaccination will be mentioned in the individual card of each animal.

### **OTHER MEASURES FOR BRUCELLOSIS CONTROL**

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- In the mainland all the animals before their introduction in a flock must be vaccinated.
- The movement of live animals from the mainland to the islands is prohibited.
- In the area where the eradication programme is implemented all the abortions must be reported in the local F.V.S., which has the responsibility of investigating the reported abortions in order to determine the etiological agent.

### **MEASURES FOR THE *Brucella melitensis* ERADICATION PROGRAMME**

#### **HEALTH STATUS OF THE FLOCKS**

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In the islands where eradication programme based on test and slaughter policy is implemented sheep and goat flocks are classified as following:

**M1** = Health status unknown

**M2** = The animals in the flock have been examined once and the results were Negative

**M+** = The animals in the flock have been examined once and at least one animal have been found infected

**M3** = Flock free of brucellosis. The flock is classified in this category if the requirements set in Directive 91/68 EEC are fulfilled.

**M4** = Flock officially free of brucellosis. The flock is classified in this category if the requirements set in Directive 91/68 EEC are fulfilled.

### **PROCEDURE FOR THE QUALIFICATION OF A FLOCK AS BRUCELLOSIS OFFICIALLY FREE (M4)**

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- A.** In a M1 flock all animals or a representative sample of animals over six months of age can be examined serologically for brucellosis. The sample size is such to give a confidence level of 95% that the disease does not exist if the prevalence is higher than 4%.
  - If the results of the test are negative the flock is qualified as M2 category.

In the flocks qualified as **M2** category with this procedure, all the animals over 6 months and no longer than 12 months after the previous test.

- If the results of this test are negative the flock is qualified as **M4** category.

**If:**

- In the interval between the tests no animals have been introduced in the flock originated from flocks of lower health status due to brucellosis.
  - All the abortions are registered and investigated and no abortion due to *B.melitensis* has been reported in the flock.
  - All the animals introduced in the flock originated from brucellosis officially free flocks (**M4**) that have negative results in two serological tests 6 weeks apart from each other. During this period, the animals must be in isolation and should not come in contact with the other animals of the flock.
  - There is no animal vaccinated in the flock for the last two years.
- B.** In case that even a single animal belonging in flocks of M1 or M2 category shows positive reaction in the serological survey, then the flock is qualified as INFECTED and classified in **M+** category.

### **MEASURES IN INFECTED FLOCKS**

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The measures foreseen in infected from brucellosis flocks are the following:

- The flocks must be in isolation and the exit and introduction of animals is prohibited.
- Only movement of animals for immediate slaughter is permitted after a special permission issued from the local F.V.S.
- The infected animals are marked with an **O** shape punch in the right ear and must be in isolation from the other animals until their slaughter.
- An epidemiological query must be conducted so the source of infection to be determined and the flocks linked with the outbreak to be determined and investigated.
- The aborted fetuses and placenta must be collected and with the appropriate security measures must be sent to the Regional Veterinary Laboratory for bacteriological examination.
- All the animals belonging to species susceptible to brucellosis as well as the dogs must be tested serologically.
- The milk coming from infected animals must be collected in separate vessels and can be used only for animal feeding after the appropriate heat treatment.
- The milk coming from infected animals can be used for cheese production after pasteurisation and only for cheese maturing for a period more than 2 months.
- The manure as well as the bedding must be collected every day in a special place and sprayed with the relevant disinfectant unless it will be covered with soil.
- It is prohibited to spray the manure in the fields earlier than 3 weeks after its collection.
- All material infected or in contact with aborted fetuses must be cleaned and disinfected.
- The aborted fetuses, placenta e.t.c must be destroyed by burning.
- The infected animals must be slaughtered as soon as possible and not later than 30 days from the day that they have been identified as infected. The movement of infected animals to the slaughterhouse is permitted after a special permission issued from the local F.V.S.
- The carcasses of infected animals undergo an inspection and the head and offal must be destroyed.

- After the slaughter of the last infected animal cleaning and disinfection of the premises under the supervision of the local F.V.S is taking place. After the completion of the disinfection procedure the local F.V.S must issue relevant certificate.
- The procedure for the re-qualification of the flock starts after the completion of the cleaning and disinfection procedure.

### **PROCEDURE FOR THE RE-QUALIFICATION OF AN INFECTED FLOCK**

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The procedure for the qualification of an infected flock as officially free (M4) is the following:

- All the animals over 6 months of age are subjects of a serological test 60 days after the slaughter of the last infected animal and after the completion of the cleaning and disinfections of the premises.
- If the results of the first test are negative, a second test must be conducted in all the animals over 6 months of age not earlier than 6 months from the first test.
- If the results of the second test are negative also, then the flock is classified in **M2** category and all the restriction measures which are in force in infected flocks are withdrawn.
- In the flocks of **M2** category a serological test must be conducted in all the animals over 6 months of age not earlier than 6 and not later than 12 months from the previous one.
- If the results of the third test are negative also, then the flock is classified in **M4** category if:
- In the interval between the tests no animals have been introduced in the flock originated from flocks of lower health status due to brucellosis.
- All the abortions are registered and investigated and no abortion due to *B.melitensis* has been reported in the flock.
- All the animals introduced in the flock originated from brucellosis officially free flocks (**M4**) that have negative results in two serological tests 6 weeks apart from each other. During this period, the animals must be in isolation and should not come in contact with the other animals of the flock.
- There is no animal vaccinated in the flock for the last two years.

### **MAINTENANCE OF THE BRUCELLOSIS OFFICIALLY FREE STATUS**

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A sheep or goat flock that situated in an area not qualified as officially free can retain the brucellosis officially free status if:

- All the animals susceptible to brucellosis have been free of clinical symptoms for at least 12 months.
- All the animals introduced in the flock originated from brucellosis officially free flocks (**M4**) that have negative results in two serological tests 6 weeks apart from each other. During this period, the animals must be in isolation and should not come in contact with the other animals of the flock.
- A sample of animals must be tested annually with negative results .
- In the sample of animals tested in each holding must be included:
  1. All the male animals over 6 months of age.
  2. All the animals that have been introduced in the flock during the year.
  3. 25% of the breeding females producing milk with a minimum of 50 animals per holding.
  4. In case that in the holding are reared 50 females or less then all the animals must be tested.

### **FREQUENCY OF TESTS IN AN AREA WHICH IS NOT QUALIFIED AS BRUCELLOSIS OFFICIALLY FREE**

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In an area which is not qualified as brucellosis officially free the frequency of tests in brucellosis officially free holdings can be extended to three years if

- 99% of sheep and goat flocks are classified as brucellosis officially free and
- the remaining sheep and goat holdings are under strict official control or undergo an eradication program.

### **SUSPENSION OF BRUCELLOSIS OFFICIALLY FREE STATUS**

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The brucellosis officially free status of a holding can be suspended in case that :

- The animals of the holding came in contact with animals of lower health status due to brucellosis .
- The routine frequency testing foreseen for the maintenance of brucellosis officially free status has not be fulfilled.
- One or more animals are suspected for brucellosis infection after a clinical or laboratory test and they have been slaughtered.

### **RAISING OF THE SUSPENSION**

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In the holdings with suspended brucellosis officially free status the suspension can be raised:

**A)** In case that the brucellosis officially free status has been suspended because the measures foreseen in the program have not been implemented or the animals of the holding came in contact with animals of lower health status due to brucellosis .

The suspension of the status is raised if all the animals over 6 months of age are serologically tested with negative results.

**B)** In case that one or more animals are suspected for brucellosis infection after a clinical or laboratory test and they have been slaughtered

The suspension of the status is raised if all the animals over 6 months of age are serologically tested with negative results. The first test is conducted 30 days after the slaughter of the suspect animal and after the completion of the cleaning and disinfection of the premises and the second 3 months after the previous one .

### **WITHDRAWAL OF BRUCELLOSIS OFFICIALLY FREE STATUS**

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- The brucellosis officially free status of a sheep or goat flock is withdrawn and the flock is classified as infected in case that the infection has been confirmed after isolation of brucella, or after an epidemiological investigation that will verify the infection.
- The brucellosis officially free status of a sheep or goat flock is withdrawn if it has been suspended and in the second serological test positive reactions are reported in one or more animals.
- The infected flocks can be re-qualified as brucellosis officially free flocks in accordance with the procedure described.

### **QUALIFICATION OF A REGION AS BRUCELLOSIS OFFICIALLY FREE**

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A region can be qualified as brucellosis officially free if:

- 99,8 % of sheep and goat flocks in the area are qualified as brucellosis officially free

**or**

- No case of ovine and caprine brucellosis has been confirmed for at least 5 years.
- The vaccination has been ceased at least 3 years.
- All the abortions are recorded and investigated.
- An ovine and caprine eradication program is in force in the region.
- A system of identification and tracing of the animals is in force in the region so the origin of each animal can be ascertained.
- 

### **MAINTENANCE OF BRUCELLOSIS OFFICIALLY FREE STATUS OF A REGION**

In order the brucellosis officially free status of a region to be maintained:

- All the provisions of paragraph 20 must be fulfilled.
- The first year after the qualification of the region as brucellosis officially free:
  1. A random sample of animals in the flocks or in the abattoir must be examined in order to determine with a confidence level of 99% that less than 0,2 % of the flocks is infected,
  - or**
  2. A random sample of 10 % of the existing animals over 6 months of age must be examined in the region.
- The second year after the qualification of the region as brucellosis officially free:
  1. A random sample of animals in the flocks or in the abattoir must be examined in order to determine with a confidence level of 99% that less than 0,2 % of the flocks is infected,
  - or**
  2. A random sample of 5 % of existing animals over 6 months of age must be examined in the region.

### **TREATMENT OF INFECTED ANIMALS**

According to the Greek legislation all the actions taken on sheep and goats aiming at the treatment of brucellosis are prohibited.

### **LABORATORY ANALYSIS**

- Sera are tested by Rose Bengal agglutination test.
- In order to gain greater sensitivity, a modification of Rose Bengal test will be carried out using 75 µL of serum and 25 µL of antigen, as it is described in the Manual of Standards and Vaccines of OIE.
- In case of seropositive reaction the serum must be examined by a complement fixation test .
- The animal is considered as infected if a positive reaction is equal or more than 20 UCEE.
- If more than 5% of sera from a flock give positive results in Rose Bengal test then all sera must be tested by C.F.T .
- For the evaluation of the new tests approved by OIE for bovine brucellosis a number of sera will be tested with Fluorescence Polarization Assay and Competitive Elisa according to the instructions given in Manual of Standards and Vaccines.
- In the eradication program based on test and slaughter policy all the animals of an infected flock showing a positive reaction to any test performed would be considered as infected and they will be slaughtered and compensated.

### **DEPOPULATION**



- In case that in a flock equal or more than 50 % of the animals are found as seropositives the flock will be depopulated.
- In case that in the first serological examination, 25% to 50% of the animals are found as infected and in the second serological examination 20% of the remaining animals are also found as seropositives then the flock will also be depopulated.
- In both cases the depopulation will be carried out after the suggestion of a committee and the permission of the Central Veterinary Service in the Ministry of Rural Development and Food. The committee is constituted from the District Veterinary Officer, a veterinarian from the F.V.S of the area and an epidemiologist appointed by the Central Veterinary Service in the Ministry of Rural Development and Food. The committee for its suggestion must take into account the epidemiology of the disease, the health status of neighbouring flocks, the geography of the area, the population density in the area, the transhumance of the flocks and all the specific features of the area. All the animals that are going to be slaughtered will be compensated according to the legal basis.
- The measure of depopulation can be applied in extend in the areas where the eradication programme is implemented if the infected flock, in accordance to the in-flock prevalence, is a potential risk for the area and the neighbouring officially free flocks. In this case also the depopulation of the flock will be implemented under the same procedure and after the suggestion of a committee and the permission of the Central Veterinary Service in the Ministry of Rural Development and Food.

### **RESTOCKING**

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- After the depopulation of a flock and before restocking with new animals all the premises, the equipment and material that have been in contact with infected animals must be cleaned and disinfected in accordance with the instructions and under the supervision of the F.V.S of the area.
- The restocking can be materialized at least 60 days after the depopulation of the flock. This period can be extended according to the local conditions in each area..
- The animals reconstituting the depopulated flock must originate from flocks free or officially free from brucellosis .
- In the area where vaccination is not implemented the animals must originate only from flocks officially free from brucellosis.
- The animals reconstituting the depopulated flock must be serologically tested with negative results 30 days before their movement in the new flock or 30 days after the reconstitution of the new flock.
- During the period of the 30 days the animals must be in isolation and should not come in contact with the other animals of the flock of origin or with animals belonging to other flocks.

### **COMPULSORY SLAUGHTER**

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- The compulsory slaughter of infected animals is carried out as soon as possible under an official supervision.
- The slaughter must take place within 30 days after the official notification of the owner.
- The infected animals must be slaughtered in a predetermined slaughterhouse after the permission of the F.V.S. and the issue of a movement certificate.
- The head and offal of infected animals must be seized and destroyed.

### **COMPENSATION OF SLAUGHTERED ANIMALS**

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- The compensation of the animals, which will be slaughtered in the implementation of this programme, must be paid within 90 days after the slaughter of the animals.
- Before the slaughter of the animals a committee will evaluate their life price and will propose the amount of compensation. A Veterinarian of the District Veterinary Service, an Officer of the District Animal Production Service and a representative of the farmers co-operative constitute the committee.
- The amount of compensation in no case can be higher than the price of the animal in the market.
- According to a bi-ministerial decision published each year the amount of compensation is specifically determined for each animal category.
- In case that some of the measures foreseen in the program are not implemented by the farmer compensation reduced till 50% can be paid to the farmer.

### **DATA COLLECTION AND ANALYSIS**

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Every month the Department of Animal Health of each District Veterinary Service will collect the data from the Field Veterinary Stations of the area and will feed the software in use.

With the aid of the software reports for the implementation of the program and the epidemiological situation of the area can be produced. All the data are sent to the Department of Zoonoses in the Ministry of Rural Development and Food and in the National Reference Laboratory for Brucellosis in Larissa.

### **INFORMATION ABOUT THE PROGRESS OF THE PROGRAMME**

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The Department of Zoonoses of the Animal Health Directorate in the Ministry of Rural Development and Food will organize meetings in each prefecture at least once a year with the staff of the Regional Veterinary Services to exchange information about the progress of the program and the evaluation of the measures foreseen for the efficient implementation of the programme. During these meetings the local problems will also be discussed so the optimal solution to be found.

In each region printed material with information about the disease will be distributed to the farmers. The consumers will be informed about brucellosis through the local TV and radio stations.

### **EXCHANGE OF INFORMATION**

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The General Directorate of Veterinary Services in the Ministry of Rural Development and Food provides all the information and prepares a regular and full report to the Commission of the E.U as well as to the Task Force Subgroup about the progress of the ovine and caprine brucellosis control and eradication programme in compliance to the E.U. legislation.

## **5. BENEFITS OF THE PROGRAMME**

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- Public Health significance – Protection of Public Health
  - Prophylaxis of farmer's health
  - Increase of animal productivity
  - Economical benefits at farm level in relation to animal health status
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## **6. DATA ON THE EPIDEMIOLOGICAL DISEASE EVOLUTION. (the last five years)**

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Please be informed about all the attached electronic data files (**2010 Programme Data and Final Technical & Financial Report included**) were submitted to the Commission along with this Programme text report and sent to the mail box address [SANCO-VET-PROG@ec.europa.eu](mailto:SANCO-VET-PROG@ec.europa.eu). Although previously submitted Electronic data sets from the past 5 years of approved by the EU programme are stored and available, they cannot be resent in one e-mail to the Commission Services due to the large volume. These files can be forwarded in separate e-mails and re-sent to the Commission Services for confirmation purposes upon request immediately.

## 7. TARGETS

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### OBJECTIVES AND TARGETS OF THE SUBMITTED PROGRAMME

Detailed analysis for 2012 Targets on the testing of flocks and animals ,Health status and diagnostic tests is given in **Annex I (excel sheets No 2,4,6 and 8 of the excel file attached: PROG2012BMELSGGR.xls)**.

#### 7.1 TARGETS FOR THE BRUCELLA MELITENSIS CONTROL PROGRAMME

The target of the programme in the mainland is the total number of adult animals reared in the mainland to be vaccinated at the end of 2012. In accordance with the results of the implementation of the programme from the previous years, the 86% of the animals (*cumulative estimate*) reared in the mainland have already been vaccinated at the end of the year 2010. It is estimated that at the end of 2012 while taking into consideration a) the current economic crisis situation and the several technical and organisational difficulties b) the new framework of the political commitment to recruit additional seasonal staff (8-month contract) for enforcing the implementation of the *B. Melitensis* programme during the years 2011 and 2012 and c) the new administrative structure as foreseen by the "Kallikratis" programme (New state Law), the vaccinated coverage rate is expected to exceed the 90 % of the average animal population.

The targets for the mass vaccination programme per each prefecture is presented in Tables 7.3.1 of ANNEX I (*excel sheets No 2 and 4 of the attached excel file: PROG2012BMELSGGR.xls*).

#### 7.2 TARGETS FOR THE BRUCELLA MELITENSIS ERADICATION PROGRAMME

The targets following the above -mentioned rationale (point 7.1) for the area where the 2012 eradication programme will be implemented are presented in attached Tables 7.1.2.1 , 7.1.2.2. and 7.2 of the ANNEX I (*related excel sheet No 6 of the excel file attached: PROG2012BMELSGGR.xls*).

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## 8. COST OF THE 2012 SUBMITTED PROGRAMME

### COST OF BRUCELLOSIS CONTROL AND ERADICATION PROGRAMME FOR 2012

Based on the 2012 targets , the estimated detailed cost of analysis for the 2012 Brucellosis control and eradication programme is presented in Table 8 of Annex I (*excel file attached: DETAILED COST ANALYSIS B MEL 2012.xls*).

The total cost of the programme is estimated to be **2.763.480 EURO** . The Greek authorities are requesting to obtain the 50 % of the financial contribution from the European Commission, which reflects to the amount of **1.381.740 EURO** .

**ANNEX I**  
**TABLE 6.5**

Data on vaccination programme			ETHΣIO 2010		REPORTING PERIOD :1/1/2010 - 31/12/2010			
Year: 2010		Disease: <i>Ovine &amp; Caprine Brucellosis</i>			Animal species: <i>Ovine &amp; Caprine</i>			
Description of the used Vaccination scheme: <i>Mass vaccination of all female adults and young breeding animals of 3 month age and above</i>								
Region (Nomos)	Total number of flocks	Total number of animals	Number of flocks in vaccination programme	Information on vaccination programme 2010				
				Number of flocks vaccinated	Number of adult animals vaccinated	Number of young animals vaccinated	Number of TOTAL animals vaccinated	Number of doses of vaccine administered
1 ETOL/NIA	11 152	1 084 864	7 049	277	6 803	9 532	16 335	16 335
2 EVIA	3 340	330 000	2 500	279	8 506	4 432	12 938	12 938
3 ARGOLIDA	1 700	215 000	1 700	20	698	671	1 369	1 369
4 ARKADIA	1 930	226 302	1 930	1 008	3 490	23 685	27 175	27 175
5 ARTA	3 797	181 840	3 795	58	101	2 600	2 701	2 701
6 ATHENS	33	4 120	33	9	0	260	260	260
7 ANAT.ATTIKI	663	81 353	663	203	3 469	3 785	7 254	7 254
8 DYT.ATTIKI	631	114 120	631	157	1 013	4 603	5 616	5 616
9 AXAIA	6 694	527 581	6 694	628	6 145	16 694	22 839	22 839
10 VIOTIA	1 870	253 431	1 870	173	2 474	5 158	7 632	7 632
11 GREBENA	804	118 394	804	228	742	8 271	9 013	9 013
12 DRAMA	980	218 263	980	344	340	18 387	18 727	18 727
13 N.EVROS (B)	380	47 100	380	298	350	6 194	6 544	6 544
14 S.EVROS (N)	1 131	192 075	828	202	1 432	10 042	11 474	11 474
15 EYRYTANIA	983	79 490	983	215	714	1 904	2 618	2 618
16 HLIEIA	4 188	356 066	4 188	261	7 241	5 875	13 116	13 116
17 HMATHIA	875	115 462	875	200	24	4 731	4 755	4 755
18 THES/NIKI	1 884	391 522	1 884	813	792	33 965	34 757	34 757
19 THESPROTIA	2 285	235 000	2 285	316	1 065	14 875	15 940	15 940
20 IOANNINA	3 339	291 265	3 339	1 395	817	15 583	16 400	16 400
21 KAVALA	1 515	264 390	1 515	47	2 706	5 412	8 118	8 118
22 KARDITSA	3 516	220 146	3 515	139	7 037	4 568	11 605	11 605
23 KASTORIA	528	90 796	528	528	0	17 137	17 137	17 137
24 KILKIS	948	210 328	998	613	2 671	24 417	27 088	27 088
25 KOZANH	1 820	270 800	1 712	950	0	30 802	30 802	30 802
26 KORINTHIA	1 150	163 720	1 078	436	1 163	11 061	12 224	12 224
27 LAKONIA	1 870	211 840	1 468	678	3 336	19 284	22 620	22 620
28 LARISSA	5 291	1 193 966	5 291	10 582	3 984	89 847	93 831	93 831
29 LESVOS	4 673	497 988	3 791	0	0	0	0	0
30 MAGNISIA	1 559	253 653	1 559	120	358	5 605	5 963	5 963
31 MESSHNTIA	2 659	174 680	2 373	460	2 070	8 648	10 718	10 718
32 XANTHI	1 891	231 222	1 304	289	845	13 108	13 953	13 953
33 PELLA	1 656	256 482	1 656	539	732	21 215	21 947	21 947
34 PIREAS	467	32 625	278	16	2 462	320	2 782	2 782
35 PIERIA	1 712	203 285	1 712	206	0	10 558	10 558	10 558
36 PREVEZA	3 234	273 774	3 200	324	0	4 355	4 355	4 355
37 RODOPI	1 765	299 068	1 765	717	328	18 035	18 363	18 363
38 SERRES	2 308	379 655	2 308	508	33 740	14 588	48 328	48 328
39 TRIKALA	2 976	304 107	2 976	756	8 674	20 745	29 419	29 419
40 FLORINA	851	139 199	851	495	48	13 719	13 767	13 767
41 FOKIDA	1 254	135 000	1 254	262	1 558	7 556	9 114	9 114
42 FTHIOTIDA	4 242	290 052	4 242	109	666	4 951	5 617	5 617
43 XAL/DIKH	811	212 258	810	582	1 996	24 932	26 928	26 928
44 LEROS	105	7 592	105	0	0	0	0	0
<b>TOTAL</b>	<b>97 460</b>	<b>11 379 874</b>	<b>89 700</b>	<b>26 440</b>	<b>120 590</b>	<b>562 110</b>	<b>682 700</b>	<b>682 700</b>

## ANNEX I

## 7.3.1 Targets on vaccination programmes

Year: 2012

Disease: *Ovine & Caprine Brucellosis*Animal species: *Ovine & Caprine*

Region	Total number of flocks	Total number of animals	Number of flocks in vaccination programme	Information on vaccination programme 2012				
				Number of flocks expected to be vaccinated	Number of animals expected to be vaccinated	Number of doses of vaccine expected to be administered	Number of adults expected to be vaccinated	Number of young animals expected to be vaccinated
ETOL/NIA	11 152	1 084 864	7 049	1 620	81 000	81 000	27 000	54 000
EVIA	3 340	330 000	2 500	81	11 340	11 340	3 780	7 560
ARGOLIDA	1 700	215 000	1 700	49	4 860	5 000	1 620	3 240
ARKADIA	1 930	226 302	1 930	3 240	61 560	61 560	20 520	41 040
ARTA	3 797	181 840	3 795	243	12 960	13 000	4 320	8 640
ATHENS	33	4 120	33	55	2 106	2 106	702	1 404
ANAT.ATTIKI	663	81 353	663	219	16 848	17 000	5 616	11 232
DYT.ATTIKI	631	114 120	631	81	6 480	6 480	2 160	4 320
AXAIA	6 694	527 581	6 694	1 782	40 500	40 500	13 500	27 000
VIOTIA	1 870	253 431	1 870	308	12 960	13 000	4 320	8 640
GREBENA	804	118 394	804	810	30 375	30 375	10 125	20 250
DRAMA	980	218 263	980	505	46 980	47 000	15 660	31 320
N.EVROS (B)	380	47 100	380	522	13 770	14 000	4 590	9 180
S.EVROS (N)	1 131	192 075	828	94	58 348	58 348	19 449	38 898
EYRYTANIA	983	79 490	983	689	13 932	14 000	4 644	9 288
HLIEIA	4 188	356 066	4 188	454	32 481	32 481	10 827	21 654
HMATHIA	875	115 462	875	648	14 580	14 580	4 860	9 720
THES/NIKI	1 884	391 522	1 884	3 078	63 180	63 180	21 060	42 120
THESPROTIA	2 285	235 000	2 285	599	33 210	33 210	11 070	22 140
IOANNINA	3 339	291 265	3 339	2 916	34 020	34 020	11 340	22 680
KAVALA	1 515	264 390	1 515	1 348	77 436	77 436	25 812	51 624
KARDITSA	3 516	220 146	3 515	528	33 534	33 534	11 178	22 356
KASTORIA	528	90 796	528	941	27 540	27 540	9 180	18 360
KILKIS	948	210 328	998	1 053	42 120	42 120	14 040	28 080
KOZANH	1 820	270 800	1 712	1 863	63 990	64 000	21 330	42 660
KORINTHIA	1 150	163 720	1 078	902	28 350	28 350	9 450	18 900
LAKONIA	1 870	211 840	1 468	1 701	48 600	48 600	16 200	32 400
LARISSA	5 291	1 193 966	5 291	3 402	207 360	208 000	69 120	138 240
LESVOS	4 673	497 988	3 791	486	59 940	60 000	19 980	39 960
MAGNHSIA	1 559	253 653	1 559	567	27 540	27 540	9 180	18 360
MESSHIA	2 659	174 680	2 373	972	22 680	22 680	7 560	15 120
XANTHI	1 891	231 222	1 304	907	64 800	64 800	21 600	43 200
PELLA	1 656	256 482	1 656	1 309	57 073	57 073	19 024	38 048
PIREAS	467	32 625	278	16	2 430	2 430	810	1 620
PIERIA	1 712	203 285	1 712	162	6 480	6 480	2 160	4 320
PREVEZA	3 234	273 774	3 200	1 620	35 640	35 640	11 880	23 760
RODOPI	1 765	299 068	1 765	2 888	77 695	78 000	25 898	51 797
SERRES	2 308	379 655	2 308	405	72 900	72 900	24 300	48 600
TRIKALA	2 976	304 107	2 976	2 053	81 000	81 000	27 000	54 000
FLORINA	851	139 199	851	1 385	32 400	32 400	10 800	21 600
FOKIDA	1 254	135 000	1 254	2 031	24 300	24 300	8 100	16 200
FTHIOTIDA	4 242	290 052	4 242	162	5 670	6 000	1 890	3 780
XAL/DIKH	811	212 258	810	1 150	65 448	65 448	21 816	43 632
LEROS	105	7 592	105	30	2 100	2 100	700	1 400
<b>TOTAL</b>	<b>97 460</b>	<b>11 379 874</b>	<b>89 700</b>	<b>45 874</b>	<b>1 758 515</b>	<b>1 760 550</b>	<b>586 172</b>	<b>1 172 344</b>

**ANNEX I**  
**TABLE 6.5**

**ETHIO - ANNUAL**

**Data on vaccination programme**

**REPORTING PERIOD :1/1/2010 - 31/12/2010**

**Animal species:** *Semi-wild bovine above 2 month of age*

**Year: 2010** **Disease:** *Brucellosis (under the B. Melitensis programme)*

	Region	Total number of herds	Total number of animals	Number of herds in vaccination programme	Information on vaccination programme 2010		
					Number of herds vaccinated	Number of animals vaccinated	Number of doses of vaccine administered
1	ETOLOKA/NIA	1 198	60 467	23	0	0	0
2	EVKITANIA	110	2 997	92	27	156	156
3	THESPROTIA	574	24 809	574	81	1 714	1 714
4	KASTORIA	51	1 898	21	32	548	548
5	LARISSA	443	40 341	422	154	1 503	1 503
6	KOZANH	88	5 964	80	42	401	401
7	GREBENA	171	6 870	50	9	330	330
8	DRAMA	46	1 792	46	46	250	250
9	S.EVROS (N)	84	4 968	84	13	273	273
10	HMATHIA	35	2 442	35	8	130	130
11	IOANNINA	428	17 369	279	130	861	861
12	KARDITSA	132	3 225	132	10	58	58
13	MAGNISIA	255	19 838	255	31	487	487
14	PREVEZA	211	12 945	211	5	66	66
15	PELLA	75	5 753	75	23	283	283
16	SERRES	407	24 982	407	44	814	814
17	TRIKALA	599	32 799	599	71	880	880
18	THESSALONIKI	41	2 735	41	19	182	182
19	FOKIDA	274	10 098	199	6	55	55
20	FTHIOTIDA	92	5 122	92	7	102	102
21	FLORINA	55	3 311	55	30	146	146
	<b>TOTAL</b>	<b>5 369</b>	<b>290 725</b>	<b>3 772</b>	<b>788</b>	<b>9 239</b>	<b>9 239</b>

**ANNEX I****7.3.1 Targets on vaccination programme****Animal species:** *Semi-wild bovine***Year: 2012****Disease:** *Brucellosis (under the B. Melitensis programme)*

Region	Total number of herds	Total number of animals	Information on vaccination programme 2012			
			Number of herds in vaccination programme	Number of herds expected to be vaccinated	Number of animals expected to be vaccinated	Number of doses of vaccine expected to be administered
ETOLOKA/NIA	1 198	60 467	23	33	266	266
EVKITANIA	110	2 997	92	101	504	504
THESSALONIA	574	24 809	574	216	2 592	2 592
KASTORIA	51	1 898	21	58	1 728	1 728
LARISSA	443	40 341	422	432	3 600	3 600
KOZANH	88	5 964	80	29	432	432
GREBENA	171	6 870	50	65	2 527	2 527
DRAMA	46	1 792	46	60	864	864
S.EVROS (N)	84	4 968	84	22	648	648
HMATHIA	35	2 442	35	43	720	720
IOANNINA	428	17 369	279	144	864	864
KARDITSA	132	3 225	132	101	1 512	1 512
MAGNISIA	255	19 838	255	173	2 592	2 592
PREVEZA	211	12 945	211	115	1 728	1 728
PELLA	75	5 753	75	86	1 296	1 296
SERRES	407	24 982	407	144	2 160	2 160
TRIKALA	599	32 799	599	288	4 320	4 320
THESSALONIKI	41	2 735	41	59	886	886
FOKIDA	274	10 098	199	144	2 160	2 160
FTHIOTIDA	92	5 122	92	86	1 296	1 296
FLORINA	55	3 311	55	79	1 188	1 188
<b>TOTAL</b>	<b>5 369</b>	<b>290 725</b>	<b>3 772</b>	<b>2 478</b>	<b>33 883</b>	<b>33 883</b>

**ANNEX I**

Member State :GREECE

**REPORTING YEAR : 2010**

**REPORTING PERIOD :1/1/2010 - 31/12/2010**

**ERADICATION PROGRAMME IN ISLANDS (ERADICATION ZONE)**

Disease: *Ovine and caprine Brucellosis*  
Species: *Ovines and caprines*

**TABLE 6.1.1**

**DATA ON HERDS**

NOMOS (REGION)	Total Number of flocks	Total Number of flocks under the programme	No. of flocks tested	No. of positive flocks	No. of new positive flocks	No. of flocks depopulated	% positive flocks depopulated	% herd coverage	% positive herds. Herd prevalence	% new positive herds. Herd incidence
1	2	3	4	5	6	7	8	9	10	11
DODEKANISA	1 760	1 592	102	14	2	0	0,00	6,41	13,73	1,96
SAMOTHRAKI	303	303	13	0	0	0	#DIV/0!	4,29	0,00	0,00
KERKIRA	327	327	67	0	0	0	#DIV/0!	20,49	0,00	0,00
KEFALLINIA	1 211	1 211	76	0	0	0	#DIV/0!	6,28	0,00	0,00
KYKLADES	4 362	4 362	164	0	0	0	#DIV/0!	3,76	0,00	0,00
LASITHI	1 385	1 300	83	22	0	0	0,00	6,38	26,51	0,00
RETHYMNO	6 448	5 376	11	2	2	1	50,00	0,20	18,18	18,18
HRAKLIO	4 102	4 102	41	13	13	4	30,77	1,00	31,71	31,71
LEYKADA	323	323	1	0	0	0	#DIV/0!	0,31	0,00	0,00
PEIRAIAS	467	202	25	0	0	0	#DIV/0!	12,38	0,00	0,00
XIOS	310	310	23	0	0	0	#DIV/0!	7,42	0,00	0,00
XANIA	3 275	3 275	2	0	0	0	#DIV/0!	0,06	0,00	0,00
SAMOS	705	705	11	0	0	0	#DIV/0!	1,56	0,00	0,00
ZAKINTHOΣ	345	345	214	0	0	0	#DIV/0!	62,03	0,00	0,00
<b>TOTAL</b>	<b>25 323</b>	<b>23 733</b>	<b>833</b>	<b>51</b>	<b>17</b>	<b>5</b>	<b>9,80</b>	<b>3,51</b>	<b>6,12</b>	<b>2,04</b>



**ANNEX I**

Member State :GREECE

**ERADICATION PROGRAMME IN ISLANDS (ERADICATION ZONE)**

REPORTING YEAR 2010

REPORTING PERIOD :1/1/2010 - 31/12/2010

TABLE 6.1.2

Disease: *Ovine and caprine Brucellosis*  
*Ovines and caprines*

**DATA ON ANIMALS**

NOMOS (REGION)	Total Number of animals	Total Number of animals under the programme	No. of animals tested	No. of animals tested individually	No. of positive animals	Slaughtering		% coverage at animal level	% positive animals. Animal prevalence
						No. of animals with positive result slaughtered or culled	Total number of animals slaughtered		
1	2	3	4	5	6	7	8	9	10
DODEKANISA	172 865	164 010	20 692	20 692	147	147	147	12,62	0,71
SAMOTHRAKI	55 620	55 620	492	492	0	0	0	0,88	0,00
KERKIRA	14 932	14 932	4 134	4 134	0	0	0	27,69	0,00
KEFALLINIA	204 767	204 767	13 192	13 192	0	0	0	6,44	0,00
KYKLADES	238 495	238 495	6 394	6 394	0	0	0	2,68	0,00
LASITHI	275 846	208 121	9 563	9 563	1	1	1	4,59	0,01
RETHYMNO	1 473 504	1 201 055	2 634	2 634	306	306	463	0,22	11,62
HRAKLIO	899 575	899 575	2 855	2 855	261	199	384	0,32	9,14
LEYKADA	17 200	17 200	248	248	0	0	0	1,44	0,00
PEIRAIAS	32 591	12 568	1 280	1 280	0	0	0	10,18	0,00
XIOS	45 255	12 689	841	841	0	0	0	6,63	0,00
XANIA	628 690	628 690	366	366	0	0	0	0,06	0,00
SAMOS	41 602	41 602	822	822	0	0	0	1,98	0,00
ZAKINTHOΣ	12 453	12 453	3 218	3 218	0	0	0	25,84	0,00
<b>TOTAL</b>	<b>4 113 395</b>	<b>3 711 777</b>	<b>66 731</b>	<b>66 731</b>	<b>715</b>	<b>653</b>	<b>995</b>	<b>1,80</b>	<b>1,07</b>

**ANNEX I**

Member State :GREECE

REPORTING YEAR: 2010

REPORTING PERIOD :1/1/2010 - 31/12/2010

Disease: *Ovine and caprine Brucellosis*

Species: *Ovine and caprine*

**TABLE 6.4**

Data on the status of herds/flocks at the end of the year 2010

NOMOS (REGION)	Total number of flocks and animals under the programme		Status of herds and animals under the programme at the end of the reporting year										
			Unknown		Not free/not officially free				Officially free suspended		Officially free		
			M1		Positive (last check) M +		Negative (last check) M2		M4 SUSPENDED		M4		
	Flocks	Animals	Flocks	Animals	Flocks	Animals	Flocks	Animals	Flocks	Animals	Flocks	Animals	
	1	2	3	4	5	6	7	8	9	10	11	12	13
DODEKANISA	1 592	164 010	0	0	14	1 442	58	5 974	1 144	112 256	376	44 338	
SAMOTHRAKI	303	55 620	0	0	0	0	0	0	290	52 396	13	3 224	
KERKIRA	327	14 932	21	516	0	0	158	7 878	148	6 538	0	0	
KEFALLINIA	1 211	204 767	154	15 808	0	0	862	150 735	185	35 876	10	2 348	
KYKLADES	4 362	238 495	0	0	0	0	682	18 030	0	0	3 680	220 465	
LASITHI	1 300	208 121	0	0	22	10 803	337	54 051	790	116 984	151	26 283	
RETHYMNO	5 376	1 201 055	3 584	800 703	2	610	0	0	1 790	399 742	0	0	
HRAKLIO	4 102	899 575	152	11 514	13	1 722	28	3 918	3 744	853 625	165	28 796	
LEYKADA	323	17 200	0	0	0	0	128	3 650	191	12 750	4	800	
PEIRAIAS	202	12 568	22	1 365	0	0	1	344	179	10 859	0	0	
XIOS	310	12 689	0	0	0	0	0	0	0	0	310	12 689	
XANIA	3 275	628 690	3 273	628 320	0	0	2	370	0	0	0	0	
SAMOS	705	41 602	100	2 920	0	0	46	1 936	64	6 346	495	30 400	
ZAKINTHOΣ	345	12 453	0	0	0	0	0	0	131	9 235	214	3 218	
<b>TOTAL</b>	<b>23 733</b>	<b>3 711 777</b>	<b>7 306</b>	<b>1 461 146</b>	<b>51</b>	<b>14 577</b>	<b>2 302</b>	<b>246 886</b>	<b>8 656</b>	<b>1 616 607</b>	<b>5 418</b>	<b>372 561</b>	

**Member State :GREECE**

**REPORTING YEAR : 2010**

**REPORTING PERIOD :1/1/2010 - 31/12/2010**

**ERADICATION PROGRAMME IN ISLANDS (ERADICATION ZONE)**

**TABLE 6.3**

*Disease: Ovine and caprine Brucellosis  
Species: Ovines and caprines*

**DATA ON INFECTION**

NOMOS (REGION)	No. of flocks infected	No. of positive animals
1	2	3
DODEKANISA	14	147
SAMOTHRAKI	0	0
KERKIRA	0	0
KEFALLINIA	0	0
KYKLADES	0	0
LASITHI	22	1
RETHYMNO	2	306
HRAKLIO	13	261
LEYKADA	0	0
PEIRAIAS	0	0
XIOS	0	0
XANIA	0	0
SAMOS	0	0
ZAKINTHOΣ	0	0
<b>TOTAL</b>	<b>51</b>	<b>715</b>

**ANNEX I**

Member State :GREECE

**2012 Targets on qualification of herds/flocks and animals****TABLE 7.2**Disease: *Ovine and caprine Brucellosis*Species: *Ovine and caprine*

NOMOS	Total number of herds and animals under the programme		Targets on the status of herds and animals under the programme at the end of reported year									
			Expected Unknown		Expected Not free/not officially free				Expected Officially free suspended		Expected Officially free	
			Herds	Animals	Positive		Negative		Herds	Animals	Herds	Animals
Herds	Animals	Herds			Animals							
<b>DODEKANISA</b>	1 592	164 010	0	0	38	497	70	7 169	915	89 804	569	66 540
<b>HRAKLIO</b>	4 102	899 575	114	8 636	30	400	34	4 701	2 995	682 900	929	202 938
<b>KERKIRA</b>	327	14 932	16	387	0	0	190	9 453	118	4 954	3	138
<b>KEFALLINIA</b>	1 211	204 767	116	11 856	0	0	860	147 540	148	28 700	87	16 671
<b>KYKLADES</b>	4 362	238 495	0	0	0	0	818	21 636	1 372	68 430	2 172	148 429
<b>LASITHI</b>	1 300	208 121	0	0	48	230	404	64 861	632	93 587	216	49 443
<b>LEYKADA</b>	323	17 200	0	0	2	63	154	4 380	152	10 200	15	2 557
<b>PEIRAIAS</b>	202	12 568	17	1 024	5	69	1	412	143	8 687	36	2 376
<b>RETHYMNO</b>	5 376	1 201 055	2 688	600 527	28	230	0	0	1 432	319 793	1 228	280 505
<b>SAMOTHRAKI</b>	303	55 620	0	0	0	0	0	0	232	41 916	71	13 704
<b>SAMOS</b>	705	41 602	75	2 190	0	0	55	2 323	51	5 076	524	32 013
<b>XANIA</b>	3 275	628 690	2 455	471 240	6	9	2	444	0	0	812	156 997
<b>XIOS</b>	310	12 689	0	0	0	0	0	0	0	0	310	12 689
<b>ZAKINTHOS</b>	345	12 453	0	0	0	0	0	0	104	7 388	241	5 065
<b>TOTAL</b>	<b>23 733</b>	<b>3 711 777</b>	<b>5 481</b>	<b>1 095 860</b>	<b>157</b>	<b>1 498</b>	<b>2 588</b>	<b>262 919</b>	<b>8 294</b>	<b>1 361 435</b>	<b>7 213</b>	<b>990 065</b>
			<b>23</b>	<b>30</b>	<b>1</b>	<b>0,04</b>	<b>11</b>	<b>7,08</b>	<b>35</b>	<b>37</b>	<b>30</b>	<b>27</b>
<b>TOTAL</b>			%	%	%	%	%	%	%	%	%	%

**ANNEX I** **6.2**

**TABLE 6.2.1 STRATIFIED DATA ON SURVEILLANCE AND LABORATORY TESTS**

**GREECE**

**SUMMARY RECORDS**

**ANIMAL SPECIES: SHEEP & GOATS**

**DATA ON SEROLOGICAL, MICROBIOLOGICAL AND VIROLOGICAL TESTS**

*Description of the used serological tests: Compliment of Fixation  
Rose Bengal*

**REPORTING YEAR: 2010 DISEASE: OVINE AND CAPRINE BRUCELLOSIS**

REGION : Whole Country/ 8 National Veterinary Labs designated for B. Melitensis Programme	Serological tests		Microbiological or virological test		Other tests	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
<b>Test category</b>			<b>Microbiology tests</b>			
<b>Serology</b>			<b>Aborted Foetus</b>			
<b>Rose Bengal</b>	90 580	2 121	27	0		
<b>Compliment of Fixation</b>	4 853	1 667				
<b>Total *</b>	95 433	3 788	27	0		

*Completed Laboratory Data records & files kept at the National Veterinary Labs and Regional authorities*

**ANNEX I**

**TABLE 7.1.1 GREECE**

**TARGETS ON DIAGNOSTIC TESTS**

**REPORTING YEAR: 2012**

**DISEASE: OVINE AND CAPRINE BRUCELLOSIS**

**ANIMAL SPECIES: SHEEP AND GOATS**

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
<b>Whole Country</b>	<i>Test: ROSE BENGAL</i>	BREEDING ANIMALS	<i>Blood sample</i>	ERADICATION & CONTROL PROGRAMME	210 000
	<i>Test:CFT</i>	BREEDING ANIMALS	<i>Blood Serum</i>	ERADICATION & CONTROL PROGRAMME	10 000
					<b>220 000</b>
<b>TOTAL ( SEROLOGY) = 220,000</b>					

**ANNEX VII.D - Part 1**

**ANNEX TO THE FINAL FINANCIAL REPORT FOR MELITENSIS PROGRAMME**

Member State : GREECE

Period of reference : 1/1/2010 -31/12/2010

Year : 2010

Species : Sheep & Goats

**OVINE AND CAPRINE BRUCELLOSIS**

Region (1)	Measures eligible for co-financing (2)																	
	Compensation																	
	Number of animals by species						Cost of animal by species						Total cost of compensated animals	Cost of animals compensated by 90 calendar days	Cost of animals compensated between 91 & 120 calendar days	Cost of animals compensated between 121 & 150 calendar days	Cost of animals compensated between 151 & 180 calendar days	Cost of animals compensated between 181 & 210 calendar days
	Sheep			Goats			Sheep			Goats								
	Αμνοί	Πρόβατα	Κριοί	Ερίφια	Αίγες	Τράγοι	Αμνοί	Πρόβατα	Κριοί	Ερίφια	Αίγες	Τράγοι						
ΔΩΔΕΚΑΝΗΣΑ		28	2		119	8		63	88		58	95	9 601,00	9 601,00				
Β. ΕΒΡΟΣ			1			1			105			105	210,00	210,00				
ΚΙΛΙΚΙΑ			5			5			97			75	861,00	315,00		210,00		336,00
ΚΟΡΙΝΘΙΑΣ			6			3			75			105	765,00	765,00				
ΞΑΝΘΗΣ			38			68			100,7			105	10 966,50	10 966,50				
ΣΕΡΡΩΝ			131			79			100			104,6	21 369,00	840,00	3 554,00	5 649,00	8 421,00	2 905,00
ΤΡΙΚΑΛΩΝ			8						69,3				555,00		210,00			345,00
ΧΑΛΚΙΔΙΚΗΣ			20			35			102			102,5	5 628,00	5 628,00				
ΑΡΚΑΔΙΑΣ						15						82,6	1 239,00	252,00			987,00	
ΘΕΣ/ΝΙΚΗΣ			32			34			98,56			111,67	6 951,00	6 951,00				
ΚΑΡΔΙΤΣΑΣ			18						116				2 088,00	1 272,00	360,00	120,00	336,00	
ΜΑΓΝΗΣΙΑΣ			7			6			120			105	1 470,00	1 470,00				
ΜΕΣΣΗΝΙΑΣ					5	6			105			98,75	1 117,50	67,50	420,00	630,00		
ΦΛΩΡΙΝΑΣ			3			2			105			86,25	487,50	105,00	315,00			67,50
ΠΕΛΛΑΣ			2						140				280,00	280,00				
ΚΑΒΑΛΑΣ			29			48			112,5			106,2	8 368,30	8 368,30				
ΡΕΘΥΜΝΟ		289	25		51	5		55	55		55	55	20 272,50	20 272,50				
<b>ΣΥΝΟΛΑ</b>		<b>317</b>	<b>332</b>		<b>170</b>	<b>315</b>							<b>92 229,30</b>	<b>67 363,80</b>	<b>4 859,00</b>	<b>6 609,00</b>	<b>9 744,00</b>	<b>3 653,50</b>

(1) Region as defined in the approved eradication programme of the Member state.

(2) Data to be given in national currency, VAT excluded.

**ANNEX VII.D - Part 2**

**ANNEX TO THE FINAL FINANCIAL REPORT FOR MELITENSIS PROGRAMME**

**Member State : GREECE**

**Period of reference : 1/1/2010 -31/12/2010**

**Year : 2010**

**Species : Sheep & Goats**

<b>OVINE AND CAPRINE BRUCELLOSIS</b>										
<b>Region (1)</b>	<b>Measures eligible for co-financing (2)</b>									
	<b>Laboratory analysis and other diagnostic tests</b>								<b>Vaccination</b>	
	Number of tests or laboratory analysis (type of test or analysis to be specified)				Cost of tests or laboratory analysis (type of test or analysis to be specified)				Number of vaccine doses (type of vaccine to be specified)	Cost of vaccine doses (type of vaccine to be specified)
	Rose Bengale	Complément fixation test	Other (to be specified)	Other (to be specified)	Rose Bengale	Complement fixation test	Other (to be specified)	Other (to be specified)	REV-1	REV-1
	<b>WHOLE COUNTRY</b>	<b>90 580</b>	<b>4 853</b>			<b>5 434,80</b>	<b>970,60</b>			<b>691 939</b>
<b>Total</b>	<b>90 580</b>	<b>4 853</b>	<b>0</b>	<b>0</b>	<b>5 434,80</b>	<b>970,60</b>	<b>0,00</b>	<b>0,00</b>	<b>691 939</b>	<b>59 921,91</b>

(1) Region as defined in the approved eradication programme of the Member state.

(2) Data to be given in national currency, VAT excluded.



**ANNEX I**

**TABLE 8**

**GREECE**

**PROGRAMME 2012**

*Detailed analysis of the cost of ovine and caprine brucellosis control and eradication programme*

Cost related to the ovine and caprine control and eradication programme <u>2012</u>	Specification	Number of units	Unitary cost in Euro	Total amount in Euro
<b>1. Testing</b>				
Cost of the analysis	Test: Rose Bengal	210 000	0,06	12 600
	Test: CFT	10 000	0,20	2 000
Cost of sampling		220 000	0,4	88 000
Other costs				
<b>2. Vaccination or treatment</b>				
Purchase of vaccine / treatment	Rev-1	1 800 000	0,087	155 880
Distribution costs				
Administering costs				
Control costs				
<b>3. Slaughter and destruction</b>				
Compensation of animals		2 500	Average compensation 90	225 000
Transport costs				
Cost related to	Specification	Number of units	Unitary cost in Euro	Total amount in Euro
Destruction costs				
Loss in case of slaughtering				
Costs from treatment of products ( milk, eggs, hatching eggs, etc)				
<b>4. Cleaning and disinfection</b>				
<b>5. Salaries (staff contracted for the programme only)</b>		190	12 000	2 280 000
<b>6. Consumables and specific equipment</b>				
<b>7. Other costs</b>				
<b>TOTAL</b>				2 763 480
				<b>Request for CoF</b>
				1 381 740



**ANNEX I**

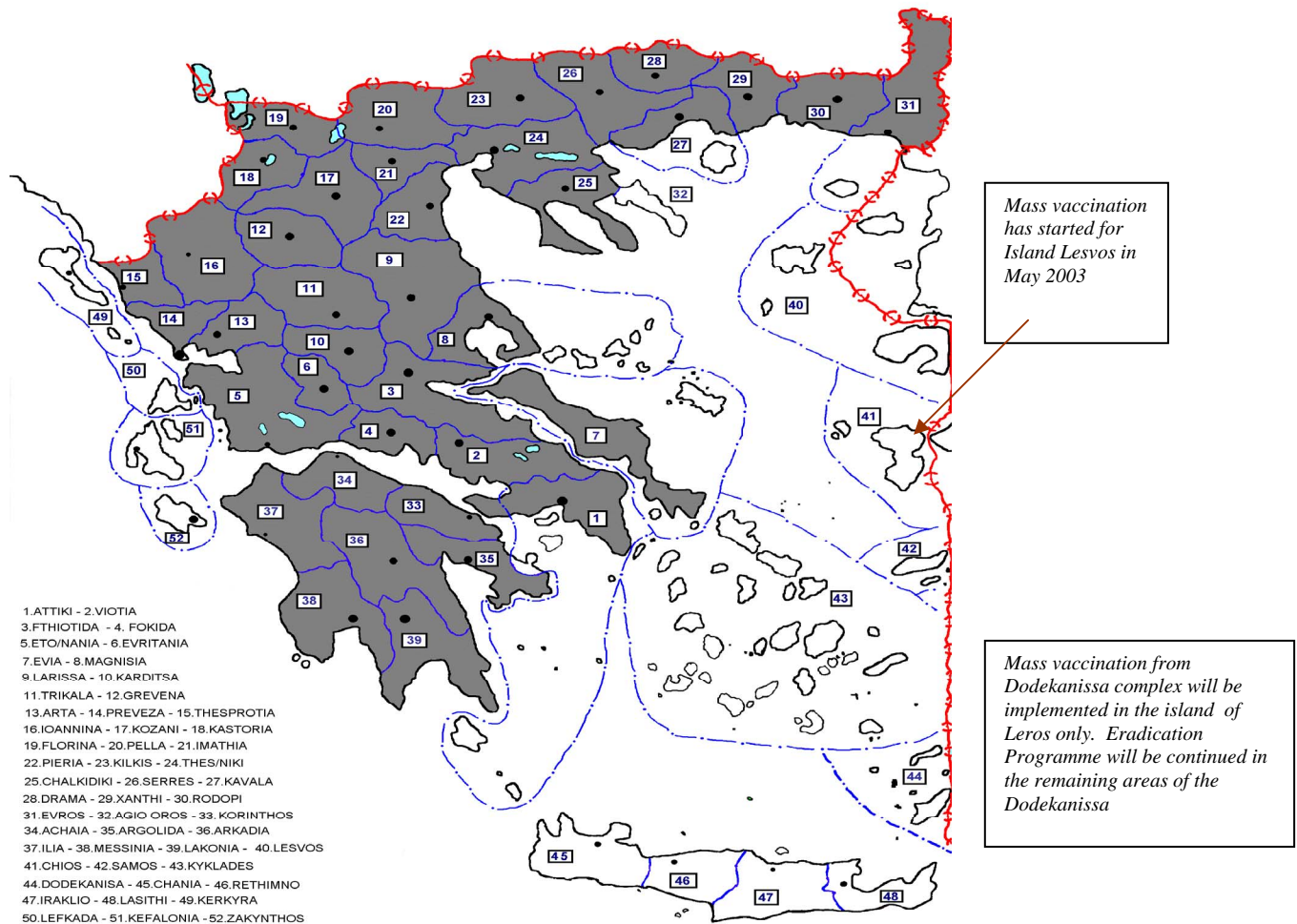
**TABLE 8** **GREECE** **PROGRAMME 2012**

*Detailed analysis of the cost of ovine and caprine brucellosis control and eradication programme*

Cost related to the ovine and caprine control and eradication programme <u>2012</u>	Specification	Number of units	Unitary cost in Euro	Total amount in Euro	Community funding requested (yes/no)
<b>1. Testing</b>					
Cost of the analysis	Test:Rose Bengal	210 000	0,06	12 600	yes
	Test: CFT	10 000	0,20	2 000	yes
Cost of sampling		220 000	0,4	88 000	yes
Other costs					
<b>2. Vaccination or treatment</b>					
Purchase of vaccine / treatment	Rev-1	1 800 000	0,087	155 880	yes
Distribution costs					
Administering costs					
Control costs					
<b>3. Slaughter and destruction</b>					
Compensation of animals		2 500	Average compensation 90	225 000	yes
Transport costs					
Cost related to	Specification	Number of units	Unitary cost in Euro	Total amount in Euro	Community funding requested (yes/no)
Destruction costs					
Loss in case of slaughtering					
Costs from treatment of products (milk, eggs, hatching eggs, etc)					
<b>4. Cleaning and disinfection</b>					
5. Salaries (staff contracted for the programme only)		190	12 000	2 280 000	yes
<b>6. Consumables and specific equipment</b>					
<b>7. Other costs</b>					
<b>TOTAL</b>				<b>2 763 480</b>	
				<b>Request forCoF</b>	<b>1 381 740</b>

## ANNEX I

### MAP I. OVINE AND CAPRINE CONTROL AND ERADICATION PROGRAMME FOR 2012



**GREY AREA WHERE MASS VACCINATION WILL BE IMPLEMENTED**

**MAP II. COUNTRY PREFECTURES IN WHICH VACCINATION OF BOVINES WILL BE IMPLEMENTED DURING 2012**

