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HEALTH AND FOOD SAFETY DIRECTORATE-GENERAL

**Directorate D – Food chain: stakeholder and international relations**

Unit D4 - Food safety programme, emergency funding

**SANTE/10769/2017**

**REPORT OF THE**

**BRUCELLOSIS**

**TASK FORCE SUB-GROUP**

**Meeting held in**

**Athens**

**Greece**

**29-31 March 2017**

**REPORT OF THE**  
**MEETING OF THE BRUCELLOSIS SUB-GROUP OF THE**  
**TASK FORCE FOR MONITORING DISEASE ERADICATION**  
**HELD IN ATHENS, Greece, 29-31 MARCH 2017**  
**SHEEP AND GOAT BRUCELLOSIS**

**PARTICIPANTS:** see Annex I

**AGENDA:** see Annex II

**LOCATION:** -) Central Competent Authority (CCA), Aharnon 2 street, Athens, Greece;  
-) Directorate of Veterinary Laboratory Centre, Neapoleos 25 street, Agia Paraskevi, Athens, Greece.

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**INTRODUCTION - Objectives of the EU-Task Force Brucellosis sub-group**

The scope of the visit is to share information and experience of the expert members with the hosting colleagues as well as to give technical support if needed or requested by the visited country. After the visit a report is issued by the experts based on the information provided on the spot by the country and on the findings verified directly by the experts themselves during the visit.

The main goal of the Task Force is to leave at disposal of the visited country the expertise of its expert members in the light to give a contribution with an external independent technical assessment in the evaluation of strength and weaknesses of strategies and measures in place for the control and eradication of the disease concerned.

Conclusions and recommendations are formulated from a general point of view and are proposed in the report with the main scope to be a basis for the Veterinary Services of the visited country to reflect on the possible improvement of different aspects of the control and eradication programme for the disease concerned. The country visited may amend the programme according to what it is suggested by the Task Force or it may choose other approaches also in consideration of social and economic factors that may influence the success of the measures adopted and which are not in the remit of the Task Force.

Conclusions and Recommendations are related to the picture of the situation as resulted during the visit based on the information provided by the country visited on the spot. Further developments of the country's situation may be the subject of a following visit aimed to get updated information and new feedback from the Veterinary Services.

The reports of the TF held in different countries in the last years are published on the following website: [http://ec.europa.eu/food/funding/animal-health/national-veterinary-programmes\\_en](http://ec.europa.eu/food/funding/animal-health/national-veterinary-programmes_en)

**REPORT OF THE  
MEETING OF THE BRUCELLOSIS SUB-GROUP OF THE  
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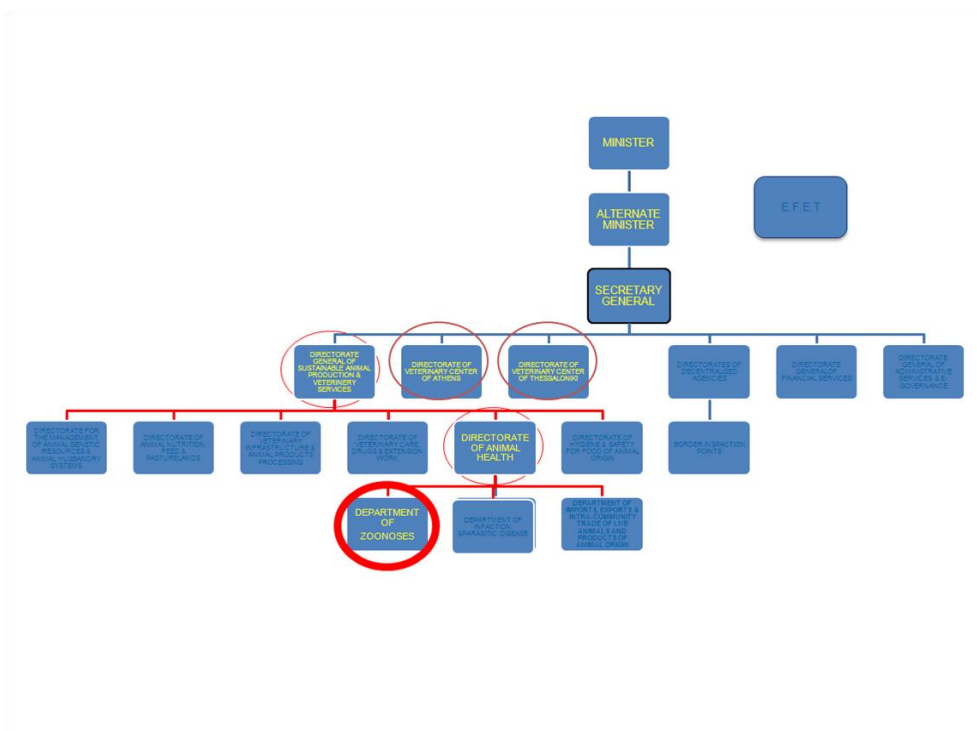
**LOCATION:** Athens, Greece

**1. Organisation and structure of the Central and Regional Veterinary Authorities in Greece.**

*Thomas ALEXANDROPOULOS, CVO, Directorate General of Sustainable Animal Production & Veterinary Services, Ministry of Rural Development and Food.*

There are still two Ministries involved in the Brucellosis programme in Greece: the Ministry of Rural Development and Food (MRD&F) and the Ministry of Interior and Administrative Reconstruction (MIAR). The department of Zoonoses (DZ) is in charge of brucellosis programme design and implementation. It belongs to the Directorate of Animal Health (DAH) which is one of the six directorates of the Directorate General of Sustainable Animal Production and Veterinary Services (DGSAP&VS) (**Figure 1**) in the MRD&F. However all decentralised veterinary services depend on the MI&AR. In each of the 13 administrative regions (redesigned in 2011 – **Figure 2**) there is a Directorate General of Rural Economy & Veterinary Medicine with a specific Department of Veterinary Medicine for each Regional Unit (RU) and more over there is a Veterinary Directorate for the whole Periphery (Region). Some “new” RUs (since 2011) have no yet their own Vet. Departments but they are serviced by the bordering ones.

A lack of staff to effectively apply the brucellosis programme has been estimated at 50% at central level and at > 55% at regional level.



**Figure 1. Greek Ministry of Rural Development and Food organisation chart.**

*(Red circles – units involved in the programme)*

The laboratory collaboration network for brucellosis (10 State Veterinary laboratories<sup>1</sup> including the Brucellosis NRL of Larissa) of the 2 Laboratory Directorates (Athens and Thessaloniki) and DGSAP&VS are under the administrative control of the Secretary General of the MRD&F. In practice the DGSAP&VS supervises and coordinates all matters associated with the operation of the labs in Greece. Specifically the Department of Identification, Registry, Artificial Insemination & Veterinary Laboratories (DIRAIVL) of the DGSAP&VS has the responsibility in close collaboration with the central financial services and upon the approval of the General Secretary of the MRD&F to effectively coordinate the laboratory network.

The NRL is responsible to supervise the 9 labs involved in the implementation of Sheep & Goat (S&G) Brucellosis programme (training proficiency ring-trials distribution of reagents etc.). DZ is responsible to supervise the implementation of the S&G Brucellosis programme by the labs involved and the veterinary departments of Regional Units and to ensure the resources for the purchase of reagents and the recruitment of the seasonal staff.



**Figure 2. Administrative subdivisions in Greece: 13 peripheries (regions)**  
*(including 13 veterinary directorates, 74 regional units and 61 veterinary departments)*

## **2. National control and eradication programme for *B. melitensis* in sheep and goats in Greece.**

*Aristomenis KATSIOLIS, Veterinary Officer. Department of Zoonoses, Directorate of Animal Health, DGSAP&VS, MRD&F.*

The Sheep & Goat Brucellosis control & eradication programme in Greece is nowadays regulated by a recent 2016 Ministerial Decision (MD 3339/117339 – GC 3589B'/04-11-2016). It is under the supervision of the DZ and applied by official veterinarians and farm veterinarians.

Since 2012 no major change occurred as regards the main measures in place and the general strategy which is based on two different approaches:

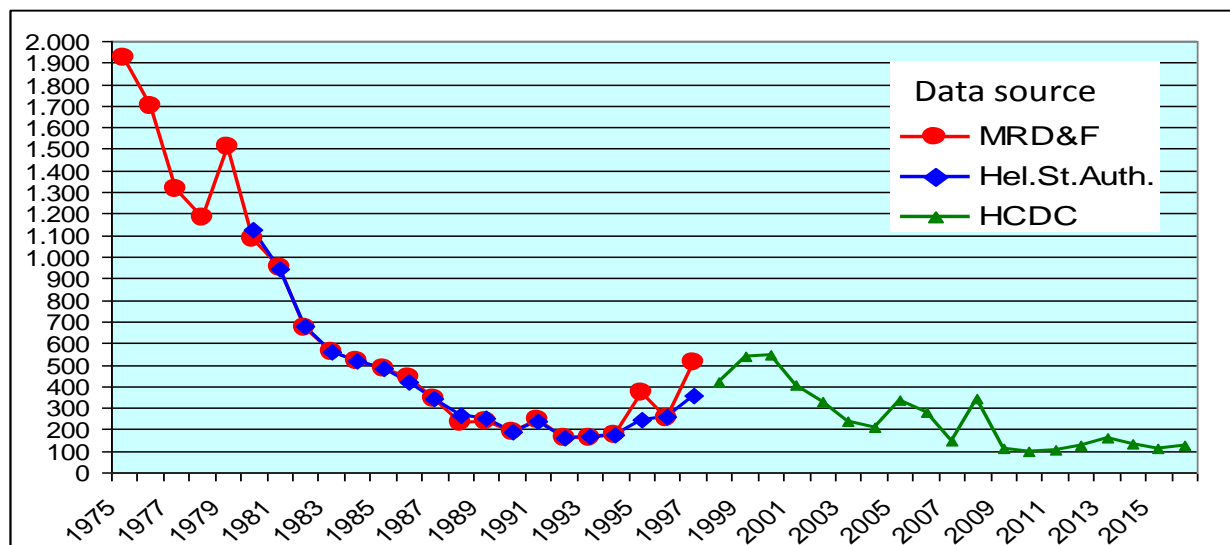
<sup>1</sup> Larissa (NRL – Thessaly); Athens (Attica); Thessaloniki (Central Macedonia); Ioannina (Epirus); Heraklion (Crete); Kavala (Eastern Macedonia); Komotini (Thrace); Tripoli (Peloponnese); Patras (Western Greece); Rhodes (South Aegean).

- a control programme in the Mainland and some Islands (Evia, Lesvos and Thasos) (Vaccination Zone), based on mass vaccination (only on healthy, non-pregnant female animals over 3 months-old);
- an eradication programme in most of the Islands area (Eradication Zone) based on test-and-slaughter policy for infected sheep and goats.

However:

- in 2014 a legal basis (Law 4235 - 11/02/2014 and 2 MD [816/156798 - 17-12-2014 and 1506/59229 - 26-05-2016]) was established for the appointment of “**Farm veterinarians**” [see hereafter] and
- in 2016 (i) the island of Leros was reintroduced in the eradication programme (based on a rough risk assessment [see hereafter]) and (ii) the **new MD included the young males in the vaccination scheme** as recommended previously by the Task-Force brucellosis sub-group.

Data on reported human cases were presented confirming the stabilisation previously observed at ca. 100-150 since 2009 (**Figure 3**).



**Figure 3. Human Brucellosis cases reported in Greece (1975-2016)**  
(HCDC: Hellenic Centre for Diseases Control & Prevention - <http://www.keelpno.gr>).

In 2016 there were 13 368 306 adult sheep and goats in 74 283 holdings throughout the country.

The staff in charge of the brucellosis programme implementation consisted in 385 official veterinarians located in 74 regional units (RUs) helped by 480 private veterinarians (so-called “farm vets”).

### **Vaccination programme in Mainland and islands of Evia, Lesvos and Thasos**

The vaccination programme is implemented in mainland Greece and in the islands of Evia, Lesvos and Thasos. Movements of animals from the vaccination zone (control area) to the eradication zone are prohibited.

The programme foresees the compulsory mass vaccination (only once) of all healthy, non-pregnant female over 3 months old as well as; as from 2017 males aged 3-6 months in holdings that use tags (ear-tags or bolus); pregnant or diseased females and over-6-month old male livestock are not vaccinated. Pregnant or diseased female livestock that are not vaccinated during the veterinarian’s visit for vaccination must be noted and vaccinated as soon as possible after lambing or kidding or at the latest during the veterinarian’s next programme visit (a month before breeding season at the latest).

The vaccine used is the *B. melitensis* strain Rev.1 administered by the conjunctival route with the standard dose ( $5 \times 10^8$  -  $2 \times 10^9$  CFU). Vaccinated animals are not identified any more as “vaccinated” (before it was carried out with a tattoo marking a “V” letter and the year of vaccination). Only livestock breeding farms are excluded from this particular programme where all livestock originates from an officially brucellosis-free farm and do not come into contact with livestock in adjacent areas and are subjected to annual blood tests for brucellosis.

At the beginning the head of the Programme at the Veterinary Department of each Regional Unit organises scheduled visits by official veterinarians to holdings in each municipality every calendar year allowing for three months after the majority of the lambing and kidding is done. In this way the official veterinarian groups together holdings to be visited in one daily round and visits holdings where almost all animals are older than three months.

The Local Veterinary administration may order blood sampling of newly vaccinated animals 3-4 weeks after vaccination in order to check effective vaccine application.

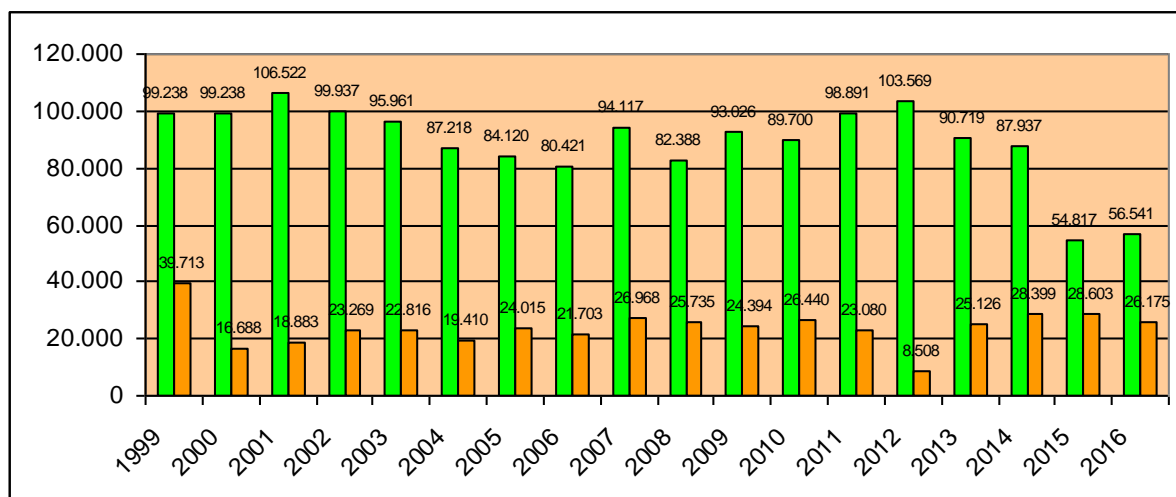
Otherwise there is an annual blood-sampling of:

- Unvaccinated males
- Males vaccinated at 3-6 months of age at least 12 months after vaccination.

In cases of mass abortion<sup>2</sup> in livestock or transmission to humans associated with the holding (outbreak) blood samples should be taken from all adult females that have not been vaccinated. Animals reacting positive are slaughtered and compensated.

After his/her intervention the veterinarian completes the Vaccination Card or/and the Blood-Sampling Card. Monthly reports are sent to the Central Veterinary Authority by the official veterinarian at the end of each month.

Veterinary Authorities presented data on the vaccination campaign from 1999 to 2011 (**Figure 4**) revealing a relatively low coverage along the years.



**Figure 4. Eligible (under the vaccination programme) and effectively vaccinated herds from 1999 to 2016 in Greece** (■ eligible flocks; ■ vaccinated flocks)

The decrease observed since 2014 in the number of eligible holdings is due according to the DZ to a recent cleaning of the database. However despite an apparent active involvement of private veterinarians and other stakeholders in the programme implementation with the actual number of holdings the programme coverage is ca. 50%.

#### **Test and slaughter programme in the Islands (except otherwise stated)**

<sup>2</sup> There is no legal definition of « Mass abortion ».

The eradication programme aims at testing all animals over 6 months of age using the Rose Bengal Test (RBT) as screening method and the Complement Fixation Test (CFT) as a confirmatory method. The animals positive to both tests are slaughter and compensated. Vaccination is prohibited.

The holdings have the following status classification:

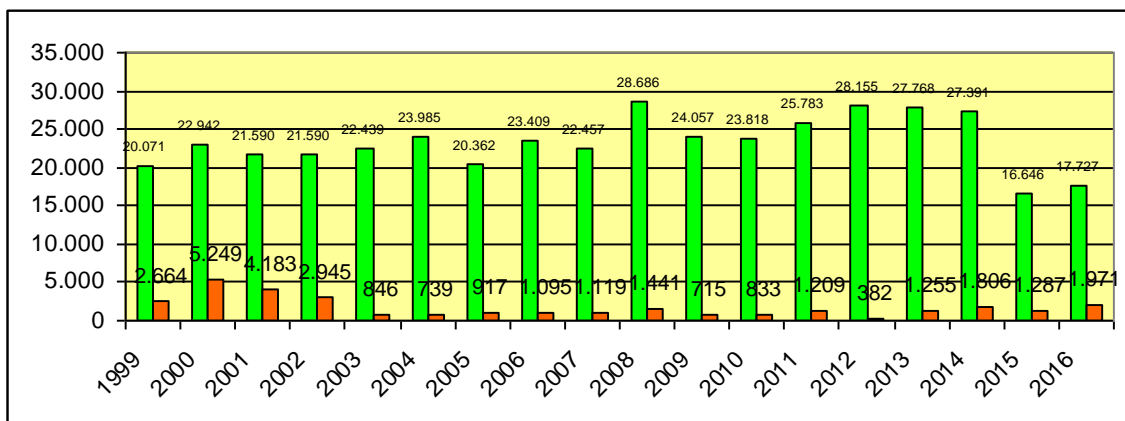
- **M1** (unknown) - Holding without any information about brucellosis. The animals have not been tested for brucellosis for the last 12 months.
- **M2** All animals (>6 months-old) have undergone serological test once with negative results.
- **M3** (Brucellosis [*B. melitensis*]-free ovine or caprine holding) – Not applied in Greece.
- **M4** (Officially brucellosis [*B. melitensis*]-free ovine or caprine holding) *i.e.*:
  - o no clinical symptoms for the last 12 months;
  - o no animal vaccinated against brucellosis for the last 2 years;
  - o animals over 6 months old have undergone 2 serological tests in an interval of 12 months at least with negative results;
  - o after the tests, all the animals born on the holding or come from M4 holdings.
- **M+** (one positive serological result at least)

In case of M+:

- the holding must be isolated;
- all movements must be prohibited;
- positive animals must be tattoo marked within 3 working days from the issuing of lab results and have to be slaughter within 30 days. Compensation is paid within 90 days of the slaughtering of the animals.
- Contaminated pastures must be prohibited for grazing for 2 months;
- In case of abortion samples must be collected and submitted to laboratory analyses;
- an epidemiological investigation should be carried out to determine the contamination source;
- Milk should not be used for human consumption (Reg. 853/2004/EC).

After the slaughtering of positive animals and the prescribed cleaning and disinfections (certified by the official veterinarian) repopulation of farm should be done after > 2 months with animals originating from M4 holdings and a serological test on all animals over 6 months of age carried out 2 months after their entrance. In case that more than 50% of the animals of the holding are infected<sup>3</sup> it may be recommended the total slaughter of the animals and the compensation only for the female animals.

Data on the eradication programme from 1999 to 2011 were presented (**Figure 5**) revealing a very low coverage along the years. Again the decrease observed since 2014 in the number of eligible holdings is due according to the DZ to a recent cleaning of the database. However, with the current number of holdings the programme flock coverage is only *ca.* 11%.



<sup>3</sup> The considered period of time is not mentioned.

Figure 5. Eligible (under the eradication programme) and effectively tested herds from 1999 to 2016 in Greece (■ eligible flocks; ■ tested flocks).

Figure 6 shows the test results from 2013 to 2016. Clearly despite a very low sample of flocks more than 50% of flocks showed at least one positive animal in 2016 (1 109 among 1 971 flocks tested).

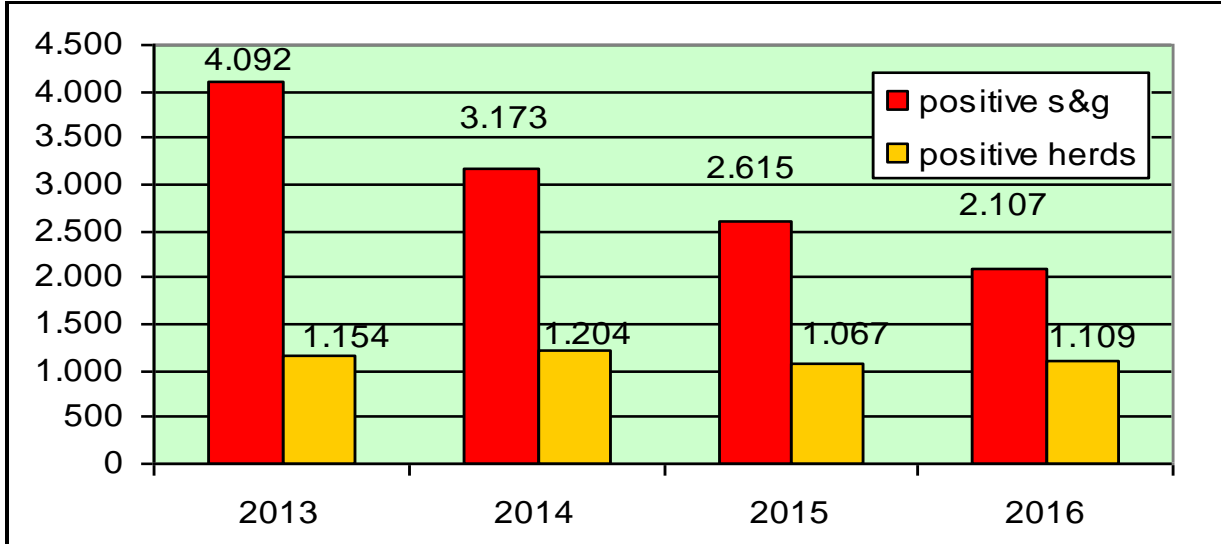


Figure 6. Positive flocks and animals in the whole country from 2013 to 2016 in Greece (■ positive animals; ■ positive flocks).

Finally, while stakeholders are not really committed yet in the programme preparation and implementation efforts have been made by the Greek veterinary services in increasing breeders' and citizens' awareness through leaflets manual and posters (see hereafter).

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**ΒΡΟΥΚΕΛΛΩΣΗ**

- πυρετός
- νυκτερινές επιδρώσεις
- εύκολη κόπωση
- πόνοι στις αρθρώσεις
- θετικά εργαστηριακά αποτελέσματα

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- Επαφή με νερό χάρη των νεκρών εμβρίων των αλλοκίτων και της γεννητικής οδού των ζώων
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Ο μελιταίος πυρετός είναι εμπόρετο νόσημα που προκαλεί σημαντική ταλαιπωρία

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### 3. Implementation of sheep and goat identification and registration system in Greece

Vasiliki ZAFEIROPOULOU. Head, Department of Animal Identification & Registration System, Artificial Insemination & Veterinary laboratories. DGSAP&VS, CC, MRD&F.

The total number of sheep and goats in Greece is 13 738 190 heads in 77 655 flocks (2016). This population includes 9 815 487 sheep and 3 922 703 goats divided among 46 561 mixed flocks 7 894 goat flocks and 23 200 sheep flocks. Sheep represents 70% of the total animal population in Greece the majority farmed on the mainland (**Figure 7**).

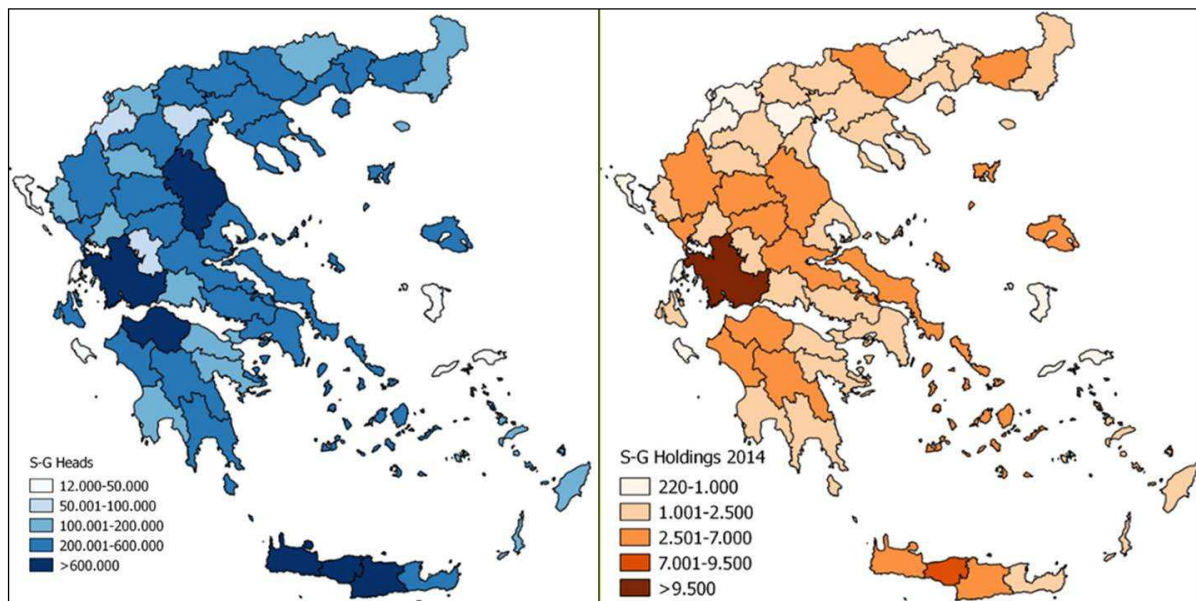


Figure 7. Greece: distribution of sheep & goat holdings / animals

The population consists of about twenty different breeds mainly milking breeds and their crosses with a great variability of morphological, physiological and productive characteristics. These breeds are adapted to the particular geographical and climatic conditions of the country and give the opportunity to exploit marginal upland areas that would otherwise not be exploited.

The system of husbandry is mainly semi-extensive in mountainous and marginal areas of the country where it is the main productive sector and where there is no other alternative employment.

The majority of flocks practices transhumance. This is characterized by an annual animal movement to and from the summer-mountain pastures covering long distances by the herds. Pastures cover about 40% of the country's total area and are mainly located in mountainous and marginal areas.

While in many EU Member States (*i.e.* Italy Portugal Spain and France) sheep and goats are mainly bred for meat production in Greece about 95% of animals are milked. Milk production is either for private consumption or is transformed by local private dairies and cooperative industry.

The Department B of the Directorate of Veterinary Care Drugs & Extension Work is the Competent Authority for the implementation and coordination of the national database and sets the requirements according to national and EU legislation. The national database is updated through 234 data entry points, allocated along the infrastructure of the Public Regional Veterinary Authorities.. The main tasks of the national database are the central register of holdings register of animals a section with the holding register movement documents and information on animal health.

The national Identification and Registration System in Greece is operative since 2004. The Joint Ministerial Decision 263493 of 27.7.2004 (GG B'1253) contains rules for the identification registration

and movement of livestock animals. All holdings of sheep and goats are registered in the database with a unique holding code with the following composition:

**Unique holding code number: EL01 3 12345**

Identification of sheep and goats is carried out conform to Regulation 21/2004/EC and the Joint Ministerial Decision 263493 of 27.7.2004.

Identification and registration of sheep and goats conform to EU Regulation in Greece is compulsory since 2004. However, farmers response to the implementation of the electronic identification was very slow till the end of 2011; afterwards the acceptance has increased.

All sheep and goats are identified, according to the standard scheme, by two means, the first of which consists of a conventional eartag (figure 8) and the second one of an electronic mean of identification (e-eartag or bolus, figures 10 and 11) within a period which is not longer than six months from birth and in any case before leaving the holding of birth, with the following alternatives:

- (a) slaughter animals which leave the holding of birth before the age of six months are identified by one mean bearing the identification code of the holding of birth (figure 9),
- (b) animals less than six months old which are (i) moving from the holding of birth (where they are first identified) to other holdings and are intended for fattening and slaughter before the age of 6 months and (ii) to be subjected to individual sampling or vaccination for the purposes of active and passive surveillance for notifiable diseases and control/eradication activities, are identified by two conventional eartags (figure 8). However, by completing the 6th month of age, their identification method should conform to the standard scheme.

Sheep and goats identified according to (b) are not intended for intra-Union trade or export to third countries.

It is worth noting that the vast majority of the keepers prefer the use of the electronic ear-tag (98.87%) instead of the ruminal bolus (1.13%) for the standard identification of their animals.

Ear tags and bolus are available through veterinarian cooperatives specialised shops for farmers and veterinary suppliers.



Figure 8. individual ear tag (flag type).



Figure 9. holding ear tag.



Figure 10. e-ear tag.



Figure 11. ruminal bolus (20g, 50g, 70g).

The holding register confirm to Art. 5 of Regulation 21/2004/EC consists of 5 parts containing all the information listed in section B of the Annex to Regulation 21/2004/EC.

Animals leaving the holding of origin for all destinations within the national territory are accompanied by a movement document consisting of 2 parts: part 1 contains the information listed in section C of the Annex to the Regulation 21/2004/EC and part 2 corresponds to the health guarantees provided by the competent authority. Animal movement notification by the holder to the CA is compulsory within 7 days of the movement.

The centralised database will be upgraded soon. It is planned to geo-reference each farm registered in the database. Farmers today only have limited access to the centralised database and only for communicating the annual census. The period for farmers for communication of the annual inventory period starts the 1<sup>st</sup> November and ends the 15<sup>th</sup> December. The number of on-line reported annual inventories increased from 2015 (15 330) to 2016 (21 955) of 9% while the total communication was almost similar taking into account a decrease of farms and animals (**Table 1**).

**Table 1. Annual inventory period (from 1<sup>st</sup> November to 15<sup>th</sup> December).**

Year	Total number of annual inventories	Number of on line reported annual inventories
2015	80 719	15 330 (18.9%)
2016	78 739	21 955 (27.9%)

The future controls on animal identification and registration prescribed by Regulation 1505/2006/EC and carried out by the official veterinarians shall cover at least 3% of the holdings and comprise at least 5% of the animals. The following sample criteria (risk analysis) are applied (**Table 2**).

**Table 2. Sampling criteria.**

80%	(50%)	number of animals
	(30%)	variation rate of animal numbers according to the preceding consecutive annual inventories
	(20%)	results of previous checks (non compliances)
20%	(100%)	randomly selected

The following number of “on the spot checks “confirm to Regulation 1505/2006/EC were carried out (**Table 3**).

**Table 3. On the spot checks during the period 2011 -2015.**

	2011	2012	2013	2014	2015
Number of checks	1 319	1 289	1 211	800	831
(% of holdings checked)	0.98	0.93	0.87	0.58	0.61
Number of holdings with non compliances	258	148	137	51	47
(% of holdings checked)	19.56	11.48	11.31	6.37	5.65
Number of holdings with sanctions	5	20	4	3	1

In about 5% of the holdings irregularity was found during last years this includes also the presence of not identified animals at farm level.

#### **4. Implementation of the National programme in Thessaly.**

*Athanasios KONSTANTINIDIS. Head of Animal Welfare Veterinary Drugs & Veterinary Applications Department. Directorate of Veterinary Services. Region of Thessaly.*

The speaker reported on the evolution of the eradication program between 2012 and 2016 in the Region of Thessaly. He assessed as well the current situation focusing on possible solutions to the major problems encountered in his area.

The region is composed by four regional units: Larissa, Karditsa, Trikala and Magnesia & Sporades Islands and as a whole the region rears one of the highest populations of sheep and goats in Greece (**Table 4**).

As regards the regional organization chart, it was highlighted the double chain of commands of the Department of Veterinary Services of regional units. From an administrative point of view these units are answerable to the Directorate of Rural Economy & Veterinary Services of regional units, but for technical matters they report to the Regional Directorate of Veterinary Services located in Larissa. This situation complicates the implementation of veterinary policies in the field.

In relation to human resources available since 2012 there has been a constant reduction of staff in the regional units due to a lack of replacement of vacant posts after the retirement of veterinary officers: 40 in 2012 29 in 2017 (more than 25% of reduction). In their RUs veterinary staff has duties related to both animal health and public health (*e.g.* slaughter houses inspections). They are responsible of audits of the Registration and Identification system as well. This overload of work is worsened by the fact of lack of flexibility to attend activities in the field due to an administrative regulation that limits working days out of the office to 60 days/veterinary officer/year. The situation is being palliated by progressively incorporating private veterinarians in the implementation of field activities (vaccination and sampling): 29 vets in 2013 82 vets in 2016. Currently private veterinarians carry out more than 70% of vaccination duties at regional level.

**Table 4. Sheep and goat population in Thessaly (January 2017).**

Regional Unit	Number of Holdings	Species	Number of animals	Total number of animals	Mean No. Animals/flock
Larissa	3 714	Sheep	795 629	1 024 957	276
		Goats	229 328		
Karditsa	1 885	Sheep	173 635	199 211	106
		Goats	25 576		
Trikala	1 801	Sheep	202 598	276 849	154
		Goats	74 251		
Magnesia & Sporades Islands	1 116	Sheep	165 067	254 094	228
		Goats	89 027		
<b>TOTAL</b>	<b>8 516</b>			<b>1 755 111</b>	<b>206</b>

The outcome of the programme is summarised in the following tables (**Table 5 Table 6**).

**Table 5. Vaccination activity in Thessaly (2012-2016)** (official estimates)

Regional Unit	2012	2013	2014	2015	2016
Larissa	0	134 979	107 910	123 088	119 479
Karditsa	7 884	24 987	32 702	49 317	24 664
Trikala	0	26 784	43 967	40 157	35 919
Magnesia & Sporades Islands	0	26 781	23 152	20 530	16 796

Note: data on vaccination coverage were not provided.

**Table 6. Holdings tested and positive results in Thessaly (2012-2016)**

Regional Unit	2013		2014		2015		2016	
	Holdings Tested	Pos	Holdings Tested	Pos	Holdings Tested	Pos	Holdings Tested	Pos
Larissa	2 325	24	2 161	232	2 492	208	2 415	270
Karditsa	398	19	634	38	1 243	52	673	53
Trikala	606	65	1 109	85	1 154	65	1 032	80
Magnesia & Sporades Islands	364	38	436	45	415	28	371	43

Note: only rams of selected holdings are tested

Human brucellosis cases ranged from 9 to 18 cases per year in the period 2012-2106.

The speaker identified a number of problems to be tackled in three main areas:

- a. Official veterinary services: shortage of staff and inadequacy of administrative procedure e.g. tender for purchasing vaccine or hiring seasonal personnel;
- b. Private veterinarians: possible conflicts of interest might lead to less strict implementation of measures and gaps in covering remote holdings; lack of commitment with practical consequences in the correct identification of animals or delays in fulfilling templates or reporting data;
- c. Farmers: low level of professional education and ignorance with regards the zoonotic implication of the disease as well its relationship with the lack of production in their holdings.

As urgent measures to overcome the situation, it was suggested:

- to increase the budget allocated to the program;
- to make immediately available the funds to the regional authorities in charge of the implementation;
- to improve the recruitment procedure of seasonal staff as well as to increase the number or permanent one.

##### **5. Implementation of the National programme in Crete.**

*Zaharias SOMARAS*. Head, Veterinary Directorate, Region of Crete.

*The presentation could not be made due to the non-attendance of the speaker.*

##### **6. Implementation of the National programme in Peloponnese.**

Maria BOUNDOUR, Veterinary Officer, Veterinary Department of Regional Unit of Arkadia, Peloponnese Veterinary Department.

Peloponnese is the southern-most region of mainland Greece and is divided in 5 Regional Units: Korinthia, Argolida, Arkadia, Messinia, and Laconia. As other regions in Greece, Peloponnese has experienced a significant reduction in staff from 2010 to 2016 (*ca.* 50%). This region still includes 13 abattoirs surveyed by the veterinary services. The actual sheep and goat population is shown in **Table 7**.

**Table 7. Sheep and goat population in Peloponnese in 2016.**

Regional Unit	Number of Holdings	Number of animals	Mean No. Animals/flock
Argolida	841	166 786	198
Arkadia	1 532	275 829	180
Korinthia	844	143 982	171
Lakonia	1 285	280 648	218
Messinia	1 217	117 316	96
TOTAL	5 719	984 561	172

In 2015 and 2016:

- 3 211 and 2 613 holdings were respectively vaccinated *i.e.* 56% and 45% of eligible holdings respectively.
- 94 081 and 67 887 animals were respectively vaccinated *i.e.* 9.5% and 6.9% of the total population a rate under the estimated rate of replacement (15-20% at least).

The vaccination coverage rates estimated by the local authority are given for 2010-2016 in **Table 8**. However when considering an estimated rate of replacement of 15-20% at least rates could be much lower *i.e.* 48-63% for 2015 and 35-46% for 2016 (for 2016 only the first semester was presented). The rate of replacement in Peloponnese is about 10%. Moreover, there are many small holdings that have not any animals for replacement or have animals for replacement every 2-3 years or more. These holdings are already vaccinated or get vaccinated every 2-3 years. This fact explains why the vaccination coverage is higher. Moreover, shows another disadvantage of the database: no export of statistics is available.

**Table 8. Vaccination coverage in Peloponnese 2010-2016 (official estimates)**

Regional Unit	2010	2011	2012	2013	2014	2015	2016
Argolida	ND	ND	ND	90	37	69	72
Arcadia	93	94	80	90	90	96	95
Korinthia	ND	ND	ND	93	95	ND	ND
Lakonia	89	86	85	80	85	85	85
Messinia	ND	ND	ND	85	80	75	80

As regards the serological testing **Table 9** gives the figures of tested and positive animals respectively for 2010-2016. Despite the sample is small (limited to few unvaccinated males) and very

heterogeneous from year to year and between Regional Units the prevalence rate appears relatively high (1.8% average) and demonstrates an ongoing circulation of infection despite the vaccination regime in place; this could be related at least in part to the abovementioned insufficient vaccination coverage.

**Table 9. Animals tested and positive results in Peloponnese (2010-2016)**

(ND: no data)

Regional Unit	2010		2011		2012		2013		2014		2015		2016	
	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive
Argolida	32	0	18	0	181	32	215	62	315	82	337	141	85	3
Arcadia	25	15	318	0	223	10	353	53	2 509	74	2 219	36	2 209	69
Korinthia	ND	ND	ND	ND	ND	ND	3	2	502	0	308	ND	0	-
Lakonia	0	ND	85	80	85	85	85	1	519	16	1 007	31	545	0
Messinia	ND	ND	ND	ND	ND	ND	1 773	27	1 973	69	2 269	17	2 226	19
Total	57	15	567	1	645	44	2 571	145	5 818	241	6 140	225	5 065	91

In this region despite a reduction of official staff it could be noted that the number of private veterinarians contracted for contributing to the programme implementation has increased from 12 in 2010 to 38 in 2016 with *ca.* 100% participation to the programme in 4 Regional Units among 5 in the Peloponnese region.

Finally, as regards human cases the average regional incidence in 2010-2016 was 6.1 case per year (2-13 cases according to the year), but these figures are probably underestimated.

The speaker concluded on the importance of the participation of private veterinarians for the programme implementation in the present situation of official staff lack and many small farms to cover. However several issues remain to be addressed in particular the need of:

- a better organisation of the vaccination plan (private vets should be responsible of an area not only of their farm units);
- an improvement of the registration of vaccinated animals (electronic label readers);
- an improvement of the database (in particular the registration of vaccinated animals)
- additional measures in Regional Units with low coverage.

## 7. Implementation of the National programme in Epirus.

*Ifigenia AVDIKOU. Veterinary Officer. Animal Welfare, Veterinary Drugs & Veterinary Applications Department-Animals Health Department. Directorate of Veterinary Services. Periphery of Epirus.*

The speaker reported on Sheep & Goats Brucellosis control activities in the Region of Epirus between 2011 and 2016. The region is divided in four Regional Units: Thesprotia, Ioannina, Arta, and Preveza. The primary sector is of high importance in this area, particularly sheep and goats and poultry farming. Small ruminants are reared in mountainous territories (77% of the total) and represent an important source of resources for the rural population. The husbandry is mainly based on extensive systems for meat and milk production.

The current sheep and goats population is 796 873 reared in 6 928 holdings. These figures have significantly dropped since 2011 (1 036 535 heads in 12 863 holdings). The main reason has been attributed to the cleaning of national I&R database carried out in 2013 and to the deletion of non-

active farming units. Nevertheless, the trend declined also in the period 2013-2015, while from 2016 onwards figures seem to slightly increase.

In relation to human resources available, 26 official veterinarians are available for the program. In addition, 29 private vets supported the program in 2016 and implemented between 27% and 72% of vaccination activities depending on the regional unit under consideration.

The outcome of the programme is summarised in the following tables (**Table 10, Table 11**).

**Table 10. Vaccination activity in Epirus (2013-2016)** (*official estimates*)

Regional Units	2013	2014	2015	2016
Vaccinated animals	89 387	84 381	70 603	55 127
Not Vaccinated animals	99 690	89 557	73 275	65 086
Total population	895 186	922 618	769 507	796 873

Note: data on vaccination coverage were not provided.

**Table 11. Vaccinated holdings and tested holdings in Epirus (2013-2016)**

	2011	2012	2013	2014	2015	2016
Vaccinated holdings	2 887	1 581	3 714	3 949	3 495	3 139
Tested holdings	14	86	1 591	3 179	2 662	3 002

Note: only male animals of holdings are tested

Human brucellosis cases ranged from 4 to 10 cases per year in the period 2011-2016.

The speaker mentioned several factors that are constraining program results. Some of them are related to the orography of the territory and the weather (cold snow and rain) combined with short time-window for vaccination that make difficult to reach the marginal holdings. Other factors are the ones already highlighted by previous speakers such as the lack of personnel or insufficient funding.

The speaker concluded stating that structure organization staff, qualification of veterinary services and seasonal flock movements make not feasible the move from the vaccination program to an eradication one.

## **8. Implementation of the National programme in Western Macedonia.**

*Theofilos KANTZOGLU Veterinary Officer Veterinary Department of Regional Unit of Kozani Veterinary Department of Western Macedonia.*

The region is divided in four Regional Units: Kozani, Florina, Grevena, and Kastoria. It is one of the most mountainous and inaccessible areas with many remote villages. The number of official vets has decreased from 25 units in 2012 to 17 units in 2017.

The outcome of the programme is summarised in the following tables (**Table 12, Table 13**).



**Table 12. Vaccination activity in Western Macedonia (2012-2016) (official estimates)**

Regional Unit	2012	2013	2014	2015	2016
Holdings	4 156	3 800	3 760	3 599	3 263
Vaccinated Holdings	1 686	2 629	2 925	2 619	2 281
Animals	641 820	631 639	616 711	607 518	624 138
Vaccinated animals (total)	51 532	88 184	82 849	88 307	81 189
Vaccinated animals (young)	49 647	76 524	78 735	83 546	71 841
Vaccinated animals (adults)	1 885	11 620	4 114	4 761	9 348

**Table 13. Testing activity in Western Macedonia (2012-2016) (official estimates)**

Regional Unit	2012	2013	2014	2015	2016
Tested holdings	530	1 391	1 894	1 826	1 631
Positive Holdings	11	78	68	78	113
Tested animals	2 912	8 055	10 054	10 254	10 126
Positive animals	20	174	188	153	189

The number of holdings is constantly decreasing. The number of holdings vaccinated has been increasing between 2012 and 2014, showing a decrease after. The number of vaccinated animals remained stable during the last four years considered. Also the number of holdings tested remained stable during the last four years considered, with the number of positive holdings showing an increasing trend, even if the number of positive animals seems to be more or less stable.

Human brucellosis cases ranged from 4 to 11 cases per year in the period 2012-2016.

The speaker mentioned several factors that are constraining program results. One major constraint is the location of holdings, scattered in a large mountain area, which requires time for visiting the holdings, also in the light that the lambing season is long and requires more than one visit to vaccinate young animals. This is also a circumstance that decreases the interest of private vets to be engaged in the programmes' activities. Another factor for the persistence of the disease is the presence of a large number of "amateur" holdings, not registered, with a small number of animals; these holdings are very difficult to identify and to control. An uncontrolled risk factor is represented by the habit, still in place, to exchange males between flocks; this is often done without giving notice to the local Veterinary Authority.

Other factors are the ones already highlighted by previous speakers such as the lack of personnel, insufficient funding or the lack of cooperation by the farmers.

## 9. Implementation of the National programme in Eastern Macedonia & Thrace.

*Thalia AINALIDOU. Head of the Veterinary Department of Kavala, Region of Eastern Macedonia & Thrace*

The speaker gave an insight to the Brucellosis programme implementation in the fourth largest region in Greece (14 157 Sq. Km) divided in five regional units (Rodopi, Evros, Xanthi, Kavala and Drama). The population of small ruminants is shown in **Table 14**.

**Table 14: Sheep and goat population in Eastern Macedonia and Trace (28/12/2016)**

Regional Unit	Number of Holdings	Number of animals	Mean No. Animals/flock
Rodopi	1 507	231 653	154
Evros	1 266	180 545	143
Xanthi	1 264	189 452	150
Kavala	906	184 008	203
Drama	730	158 750	217
<b>TOTAL</b>	<b>5 673</b>	<b>944 408</b>	<b>166</b>

As regards the regional organization chart the double chain of command of the Department of Veterinary Services of regional units was highlighted. From an administrative point of view these units are depending from the Directorate of Rural Economy & Veterinary Services. However for technical matters they report to the Regional Directorate of Veterinary Services. This situation complicates the implementation of veterinary policies in the field.

In relation to existing human resources, there are 6 veterinarians available at the regional unit office and 25 in the veterinary stations. However 11 out of these 25 veterinary stations were closed due to lack of personnel. For instance, in the Island of Samothraki there is only 1 official veterinarian. This shortage of staff may pose problems given that the region has borders with Bulgaria and Turkey where is a special need to reinforce surveillance on exotic diseases.

The main measure of the program is vaccination (Mainland and Thasos Island) and eradication in the Island of Samothraki. The outcome of the programme is summarised in the **Table 15**.

**Table 15. Vaccination and sampling activity in Eastern Macedonia and Trace (2010-2016) (official estimates)**

Year	Existing		Vaccinated				Sampling		
	Holdings	Animals	Holdings	%	Animals	%	No of animals	Positive animals	Positive holdings
2010	7 972	1 192 343	1 822	23%	67 994	6%	2 857	261	28
2011	8 101	1 172 337	2 852	35%	94 554	8%	6 089	188	59
2012	8 052	1 159 543	884	11%	37 065	3%	4 114	47	19
2013	8 710	1 108 898	3 129	36%	162 125	15%	21 390	943	413
2014	7 467	1 028 843	2 386	32%	87 112	8%	14 543	328	180
2015	7 285	932 161	2 066	28%	75 264	8%	17 991	337	185
2016	5 673	944 408	1 888	33%	70 425	7%	14 207	61	32

Note: only rams of selected holdings are tested

Human brucellosis cases ranged from 9 to 18 cases per year in the period 2012-2016. Nevertheless 170 cases of human brucellosis were notified in the island of Thasos in 2008.

The speaker shared her point of view with regards to possible improvements of the system. The official veterinary services should not only be better staffed, but also their main tasks should be revised to achieve the best planning and follow up of activities, as well as to audit and supervise field activities. With regards the implementation of the program in holdings, in a first phase (3 years) this

should be in hands of external personnel, either private veterinarians or seasonal staff, but contracted regularly during this period to warrant the qualification of field teams. The program must make available the minimum resources for a good implementation (vaccines, injection material, etc.).

After this first phase, the speaker suggested that the program should be financially assumed by the farmers, except duties dealing with eradication of positive flocks that would remain in hands of the official veterinary services, as well as the control of private vets and audits. This shall be completed by a system rewarding farmers with good collaboration and penalizing non-compliance with the program.

#### **10. Presentation of FVO recommendations (2015-7571) and problems engaged.**

*Myrsini TZANI, Head of the Department of Zoonoses (DZ), Directorate for Animal Health (DAH), DGSAP&VS, CCA, MRD&F.*

*The presentation was withdrawn.*

#### **11. Visit to the Directorate of Vet. Laboratory Centre of Athens.**

*Dimitrios VOURVIDIS, Head of Brucellosis laboratory, Directorate of Veterinary Laboratory Centre of Athens, MRD&F.*

The Directorate of Veterinary Laboratory Centre of Athens (which depends directly on the Secretary General of the MRD&F) includes the following departments:

- (i) Diagnostic Pathology Anatomy Histology and Microbiology (to which belongs the Brucellosis laboratory)
- (ii) Molecular Diagnostic Foot and Mouth Disease Viral Rickettsial and Exotic Diseases
- (iii) Parasitology & Parasitic diseases Entomology and Bee Pathology
- (iv) Pathology of Aquatic Organisms
- (v) Toxicology Residues & Environmental Contaminants and
- (vi) Food Hygiene. This Directorate also coordinates the Departments & State Laboratories of Chalkida, Tripoli, Patras, Rhodes, Chania and Heraklion (Staff = 88 people).

Three people work for the brucellosis laboratory: two vets and one technician. The areas covered are:

- For the vaccination zone: the Regional Unit of Attica Central Greece Lesbos island;
- For the eradication zone: Northern and Southern Aegean as well as Ionian Islands.

The laboratory is accredited for both RBT and CFT performed according to EU procedures with approved standardised reagents. The RBT is performed according to the French technique with simultaneous mixing of samples and antigen. In this laboratory CFT is applied on all samples RBT positive but never on RBT negative samples. According to the data presented negative results have been regularly observed since 2014 only in Ionian Islands, Cyclades, Samos, Chios and Fokida (Central Greece). However, the samples tested were in few numbers compared to the eligible samples.

A study aiming at demonstrating the possibility of stopping vaccination in the island of Leros was presented. Among 94 flocks 83 were included in the study (89%). However, only 651 animals (including all 330 males and only 321 randomly selected females [6%]) were tested, *i.e.* 10.7%. Ten flocks among 83 gave positive results, *i.e.* flock prevalence = 12% [CI 95%; 5.04-19.05%] an overall individual prevalence = 2.61% [CI 95%; 1.39-3.84%] and an individual prevalence in males = 2.73 [CI 95%; 0.97-4.48%]. Taking into account the high specificity of RBT in sheep and goats (>99.9%), these seroprevalence figures demonstrate that infection remains present in the island at a level that would

be difficult to handle without vaccination, taking into account the present lack of resources of veterinary services. Moreover, stopping vaccination in this island could lead to a rapid increase in the prevalence rates.

For the future, the laboratory expectations are to receive more statistically representative samples from the area covered, in order to get more relevant data to evaluate the programme implementation progress.

The TF group had then the opportunity to visit the Brucellosis laboratory, which is well organised, equipped, and maintained. However, there is still a great burden of paper work, since all data have to be registered manually on paper sheets (sampling forms are themselves filled manually by the local vet.) and then entered in the local LIMS and in the I&R Database (the two systems are not connected).

## **12. Presentation of the National Reference Laboratory (of Larisa) on data regarding the 10 national laboratories.**

*Athanasia STOURNARA, Head National Reference Laboratory for Brucellosis, MRD&F, Larissa.*

*The presentation could not be made due to the non-attendance of the speaker.*

However from the presentation file provided by the organisers, it can be concluded that:

- Only 6 approved laboratories among 9<sup>4</sup> are accredited according to ISO 17025 standard for the RBT and only 4 for the CFT.
- The proportion of flocks tested throughout the country is very low: less than 2 500 among ca. 17 000 eligible flocks for 74 283 holdings throughout the country in 2016.
- A proportion of 2.5% RBT positive animals (9 509) in 2016 (only 373 926 animals tested) and among them only 39% tested in CFT (3 718) of which 1 551 (ca. 42%) were CFT positive (and probably slaughtered); *i.e.* only 16% of RBT positive animals have probably been slaughtered taking into account that most RBT negative animals have not been CFT tested while RBT negative/CFT positive (infected) animals have been reported as frequent in infected areas in other EU infected member states.
- Bacteriological diagnosis is very rarely carried out (only 19 cultures in 2016).

**A warm thank you is extended to the Greek hosts for their great hospitality and willingness to share information about the details of the programme. The effort of arranging this meeting has been greatly appreciated.**

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<sup>4</sup> The information is not given for the Heraklion laboratory

## Conclusions

1. Since the last visit of the Task Force in Greece in 2012, the expert group acknowledges the efforts made to increase the staff materials and equipment dedicated to the activities to be carried out in the framework of the brucellosis programme and in particular the involvement of specifically contracted veterinarians in the programme field implementation which seems to have a positive impact on the vaccination coverage at least in some regions. However the turn-over of retired officials has not been covered by additional recruitment then posing the risk that human resources would be inadequate in a long term perspective for the future managing of the programme.
2. Identification and registration of animals is a key tool for a successful control and/or eradication programme. The group acknowledges the progresses made for the improvement of the livestock identification and registration system as well as the progresses in the IT systems for animal movements and for electronic animal identification system. However the quantity and quality of data collected is still not sufficient to support an adequate planning of the programme and a sound epidemiological assessment of its results. Data recording has better quality but still needs improvements both at central and local levels in particular as regards data management from the field to the central level.
3. The lack of financial and human resources as well as the lack of flexibility in staff reallocation have been and still continue to be important limiting factors in setting and achieving the objectives of the programme. Therefore the activities foreseen including data collection and evaluation should be focused on few clear and achievable objectives. The expert group acknowledges the sound assessment of gaps and difficulties made in some regions.
4. The testing coverage in islands (eradication programme) is still not sufficient to evaluate the prevalence of the disease and to demonstrate the freedom from disease in these areas.
5. Resources allocated to laboratories have been increased. Almost all laboratories are accredited according to ISO 17025 standard.

## Recommendations

1. The increase and the reallocation of the human resources available for the programme should continue to be considered as a priority by central and local authorities for maintaining and achieving new progresses in the epidemiological situation and in particular regarding the increase of the vaccination coverage. Consideration should be given to the following measures:
  - To increase the commitment of the permanent staff in the organisation supervision and control of the activities carried out in the context of the programme (*i.e.* vaccination in particular) in order that at mid-term it will be the main activity of official veterinary services.
  - To increase the involvement of specifically contracted veterinarians in the field implementation of the programme.
2. The database of I&R should be improved in order to include all existing holdings and animals. A future connection with laboratory results is needed. The database should be further developed in a way that it can be used as a management tool to follow-up the progresses of at least the vaccination programme. The people in charge of monitoring the programme should exchange experience with other Member States in particular regarding epidemiology methods and informative systems implementing and management.
3. Taking into account the limited resources available the first priority should be to focus on specific and achievable issues *i.e.* to increase the vaccination coverage in order to reach a satisfactory target of at least 80% of all animals in 100% flocks in order to limit significantly the risk of human cases. This target should be met as soon as possible within the next 5 years at the latest. This implies to stop activities with limited added value in the current epidemiological situation such as serological control of vaccination efficiency in females and serological surveillance in males.
4. In the vaccination zone the benefit of leaving non vaccinated males for monitoring purposes gives limited information and should be discontinued. The practice still in place of leaving non-vaccinated males in vaccinated flocks for monitoring purposes may pose the risk of these animals further transmitting the disease. Then males also should be protected from contracting the disease. Male batches should be renewed by vaccinating young males from 3 to 6 months of age.
5. For the success of the eradication strategy in the eradication zone it is necessary a strict control and enforcement of the movement ban from the vaccination zone.
6. In the eradication zone and in infected flocks, animals positive to RBT should be slaughtered regardless to their testing with CFT. If possible testing should be carried out in parallel *i.e.* animals positive to either RBT or CFT should be slaughtered.
7. The current epidemiological situation in the islands should be re-evaluated in depth by using science-based epidemiological studies. The results of those studies should be used to evaluate the most effective policy towards the progressive qualification of flocks and its maintenance.
8. In the islands where it has been demonstrated that (*i*) the flock prevalence is less than 1% of eligible flocks (*ii*) all flocks and animals are identified and registered and (*iii*) a movement control is in place, an eradication strategy could be implemented.
9. Any eradication policy should be based on the requirements of the EU regulations as well as on the recommendations of the TF which are based on the experience of the Member States that have made clear progress in disease eradication (*e.g.* RBT/CFT parallel testing stamping out strict movement control and pasture management etc.). In islands in which the infection has been confirmed either by the presence of positive flocks or the occurrence of human cases vaccination of young replacement animals should accompany the current test-and-slaughter policy in the whole area at risk.

10. It is advisable an improvement in the skills in epidemiology of infectious diseases also for laboratories at least at central and regional level in order to increase the capacities in monitoring the programme and in performing epidemiological investigations.

## Annex I

**MEETING OF THE BRUCELLOSIS SUB-GROUP OF THE  
TASK FORCE FOR MONITORING DISEASE ERADICATION  
HELD IN ATHENS – GREECE, 29-31 MARCH 2017  
SHEEP AND GOAT BRUCELLOSIS**

### PARTICIPANTS

#### Task Force Brucellosis Sub-Group - members

- Fabrizio DE MASSIS Chairman Italy
- Manuel DURAN-FERRER Spain
- Bruno GARIN-BASTUJI France
- Ernst STIFTER Italy

#### European Commission

- Christophe BERTRAND Head of Unit D4 "Food safety programme, emergency funding" (DG SANTE)
- Nicolas KRIEGER Unit D4 (DG SANTE)

#### FVO Observer

- Milos JURAS Unit F2 (DG SANTE)

#### Greek Representatives (main list)

▪ Thomas ALEXANDROPOULOS	CVO, Head, Directorate General of Sustainable Animal Production and Veterinary Services (DGSAP&VS), Central Competent Authority (CCA), Ministry of Rural Development and Food (MRD&F)
▪ Chrysoula DILE	▪ Head of Animal Health Directorate, DGSAP&VS, CCA, MRD&F
▪ Aristomenis KATSIOLIS	Veterinary Officer. DZ, DAH, DGSAP&VS, CCA, MRD&F
▪ Vasiliki ZAFEIROPOULOU	Head, Department of Animal Identification & Registration System Artificial Insemination and Veterinary laboratories, DGSAP&VS, CCA, MRD&F
▪ Athanasios KONSTANTINIDIS	Head, Animal Welfare Veterinary Drugs and Veterinary Applications Department, Directorate of Veterinary Services, Periphery of Thessaly
▪ Maria BOUNDOURI	Veterinary Officer, Veterinary Department of Regional Unit of Arkadia, Peloponnese Veterinary Department
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▪ Theofilos KANTZOGLU	Veterinary Officer, Veterinary Department of Regional Unit of Kozani. Periphery of Western Macedonia.
▪ Thalia AINALIDOU	Head, Veterinary Department of Regional Unit of Kavala, Periphery of Eastern Macedonia & Thrace
▪ Myrsini TZANI	Head of the Department of Zoonoses (DZ), Directorate for Animal Health (DAH), DGSAP&VS, CCA, MRD&F
▪ Mihalis PATAKAKIS	Head of the Directorate of Veterinary Centre of Athens
▪ Dimitrios VOVRIDIS	Head of Brucellosis laboratory, Directorate of Veterinary Centre of Athens, MRD&F

## Annex II

**MEETING OF THE BRUCellosIS SUB-GROUP OF THE  
TASK FORCE FOR MONITORING DISEASE ERADICATION  
HELD IN ATHENS - GREECE, 29-31 MARCH 2017  
SHEEP AND GOAT BRUCellosIS**

### DRAFT AGENDA

<b>#</b>	<b>Timing</b>	<b>Item</b>	<b>Presenters/ Rapporteur</b>
<b>DAY ONE</b>			
<b>Central Competent Authority (CCA). Aharnon 2 street. Athens</b>			
1	09:00	Welcome and introduction – Presentation of the organisation and structure of the Central and Regional Veterinary Authorities in Greece	Thomas Alexandropoulos (CVO)
2	09:30	Presentation of the National S&G Control and Eradication programme	Aristomenis Katsiolis
3	09:50	Presentation of the National Animal Identification and Registration System and Database	Vasiliki Zafeiropoulou
4	10:20	Presentation of the implementation of the national programme in Thessaly	Athanasios Konstantinidis
5	10:45	Presentation of the implementation of the national programme in Crete(*)	Zaharias Somaras (**)
6	11:10	Presentation of the implementation of the national programme in Peloponnese	Maria Bountouri
	11:35	<i>Coffee Break</i>	
7	12:00	Presentation of the implementation of the national programme in Epirus	Ifigenia Avdikou
8	12:30	Presentation of the implementation of the national programme in Western Macedonia	Theofilos Kantzoglou
9	13:00	Presentation of the implementation of the national programme in Eastern Macedonia & Thrace	Thalia Ainalidou
	13:30	<i>Lunch</i>	
10	14:30	Presentation of FVO recommendations (2015-7571) and problems engaged	Myrsini Tzani
	15:30	End of Session I – Panel Discussion.	All Participants
<b>DAY TWO</b>			
<b>Directorate of Veterinary Laboratory Center. Neapoleos 25 street, Agia Paraskevi. Athens - Greece.</b>			
11	09:00	Visit to the Directorate of Vet. Laboratory Centre	Mihalis Patakakis Dimitrios Vourvidis
	09:30	On the spot visit to the Department of Brucellosis	Anna Kyrma
12	10:00	Presentation of the National Reference Laboratory (of Larisa) on data regarding the 10 national laboratories(*)	Athanasia Stournara (**)
	10:30	<i>Coffee Break</i>	

11:00	Introduction to the co-financed programmes in EU and requirements	Nicolas Krieger
11:20	Guidelines on eradication of brucellosis in the EU (WD SANCO/6095/2009)	Bruno Garin-Bastuji
11:40	Review of the conclusions of the last Task force visit in Greece in 2012	Ernst Stifter
12:00	Presentation of the implementation of S&G Br. Programme in Italy	Fabrizio De Massis
12:20	Presentation of the implementation of S&G Br. Programme in Spain	Manuel Duran-Ferrer
13:00	<i>Lunch</i>	
15:30	End of Session II – Panel Discussion.	All Participants
<b>DAY THREE Central Competent Authority (CCA) Aharnon 2 street Athens</b>		
09:00	EU Task Force Brucellosis subgroup meeting.	TF BRC Subgroup
10:00	Presentations of final conclusions and recommendations by the Group - Final opportunity for questions and discussions.	All Participants
11:30	<i>Coffee Break</i>	
12:00	Discussions and questions	
13:00	<i>Lunch</i>	
13:30	Discussions and questions	
15:30	<i>Closure of the meeting</i>	
(*) The presentation was withdrawn		
(**) The speaker did not attend the meeting		