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HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

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

Surveillance and Eradication programme of Bluetongue

Approved* for 2010 by Commission Decision 2009/883/EC

Bulgaria

* in accordance with Council Decision 2009/470/EC



MINISTRY OF AGRICULTURE AND FOOD

NATIONAL VETERINARY SERVICE

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P R O G R A M

**FOR SURVEILLANCE OF BLUETONGUE DISEASE IN RUMINANTS TO BE
IMPLEMENTED BY THE NATIONAL VETERINARY SERVICE OF REPUBLIC
OF BULGARIA IN 2010**

Standard requirements for the submission of programmes of monitoring, eradication and control of animal diseases co-financed by the Community

1. Programme identification

Member state: **Republic of Bulgaria**

Disease(s) ⁽¹⁾: **Bluetongue in ruminants**

Year of implementation: **2010 (01.03.2010 - 30.11.2010)**

Reference of this document: Law on veterinary activities and ORDINANCE No 19 of 14.12.2005 for prevention, control and eradication of bluetongue in ruminants, implementing Directive 2000/75/EC and Regulation (EC) 1266/2007.

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2. Historical data on the epidemiological evolution of the disease(s) ⁽¹³⁾:

The bluetongue disease was first found in Bulgaria in July 1999 in the region of Burgas. Until then the disease had never been registered in territories situated beyond the 42 parallel. From 06.07.1999 until the middle of august the disease was spread in four regions – Burgas, Yambol, Haskovo and Kurdgali regions, which are situated near the south country border with the Republic of Turkey and Republic of Greece.

¹³ A concise description is given with data on the target population (species, number of herds and animals present and under the programme), the main measures (testing, testing and slaughter testing and killing, qualification of herds and animals, vaccination ...) and the main results (incidence, prevalence, qualification of herds and animals). The information is given according distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.

As soon as the disease was found NVS, under the direction of Dr. Philip Mellor from the Community Reference Laboratory for bluetongue in Pirbright, Great Britain, immediately implemented the following measures eradication of the disease:

- Destruction of sheep with clinical signs of bluetongue through "stamping out" and burial. 975 sheep were destroyed.
- Smoking with hot and cold solutions through spraying from airplanes and special guns of a territory with radius 20 km around the affected settlements.
- Disinsectization in the vector habitats.
- Disinsectization in the infected animal holdings and in the holdings located within the protection and surveillance zones.
- Ban on the movement of susceptible animals from the affected regions to the country inside.
- Ban on grazing ruminants in the hours of highest vector activity.
- Disinsectization of all vehicles entering and leaving the protection and surveillance zones.
- Washing the small ruminants in specially adapted baths using insecticide solutions with repellent action.
- The large ruminants were treated with insecticide solutions with repellent action using manual sprayers.
- Testing of samples from wild ruminants from the affected regions.

As a result of the implemented measures the disease was limited to the 20-30 km zone from the south border in the affected regions.

In 1999 a programme for surveillance of bluetongue in ruminants was launched along the southern border of the Republic of Bulgaria. The programme involved monthly testing (from May until October) of sentinel animals for detecting antibodies against the bluetongue virus.

In order to determine the bluetongue serotype samples were sent for typing to the Community Reference Laboratory for bluetongue in Pirbright, Great Britain. The laboratory analysis revealed presence of serotype No 9.

At the end of September 2001 bluetongue in ruminants was found for the second time in animals reared near the western border of the Republic of Bulgaria with FYRO Macedonia and the Republic of Serbia. The laboratory investigations again revealed serotype No 9. 22 sheep showing clinical signs of the disease were destroyed. NVS immediately took the steps described above.

At the beginning of October 2006 as a result of the testing of samples from sentinel animals under the surveillance programme, bluetongue seropositive animals not showing clinical signs of the disease were found in the region of Burgas near the border with the Republic of Turkey. Since then no seropositive animals have been detected on the territory of the country.

3. Description of the submitted programme¹⁴:

The programme includes:

- Laboratory testing of blood samples from bovines, sheep and goats for detection of antibodies against the bluetongue virus;
- Destruction of ruminants showing clinical signs of the disease;
- Payment of compensations to the owners of the compulsory killed or slaughtered animals;
- Catching culicoides for quantity and species determination;
- Emergency vaccination against the disease;

4. Measures of the submitted programme

4.1. Summary of measures under the programme

Duration of the programme: **01.03.2010 - 30.11.2010**

- Control
- Testing
- Emergency slaughter of ruminants reared near the animals infected with the bluetongue virus.
- Killing of ruminants showing clinical signs of the disease.
- Vaccination
- Treatment
- Placing the products on the market
- Monitoring or surveillance
- Other measures (specify): treatment of susceptible animals with disinsectants with repellent action.
- Disinsectization of the sites of vector reproduction.

Remark: in case of detection of BT virus on the territory of the country and it is necessary vaccination to be carried out, the NVS will supply vaccine against the disease and the coats will be reimbursed by the Commission.

¹⁴ A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence ...), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination ...), the target animal population and the area(s) of implementation and the definition of a positive case.

- Vector /culicoide/ control

Each month culicoïdes are collected from the light traps for species and quantitative determination by all RVSs on the territory of the country. Based on risk analyse the light traps are situated in the high risk regions, along the southern, western country borders and some central municipalities. The light traps are placed near animal holdings and water reservoirs in 2 consecutive nights recording the maximum and minimum night temperatures using a maximum-minimum thermometer and the latitude and longitude by GPS of the trap location.

The date and the town/village from which the culicoïde samples were taken are indicated on the sample and the latter is sent to the laboratory of Arachnoentomology at the National Diagnostic Research Veterinary Institute (NDRV) in Sofia for testing, accompanied by a letter containing all data (temperature and location) recorded during the collection.

- Measures at the border veterinary inspection posts (BVIP)

Border veterinary inspectors carry out checks at the BIPS with third countries.

- Surveillance of the health status of the wild ruminant population.

In the 30-km zone along the southern and western country borders blood samples are taken periodically from killed wild ruminants for serological testing for detection of antibodies against the bluetongue virus.

- Surveillance of the health status of ruminants on the territory of the country.

Depending on the epizootic situation NVS may order blood sampling for laboratory analysis of ruminants reared close to water reservoirs and quarantine stations, intended for collecting ruminants to intracommunity trade or export to third countries. Due to the unfavourable epizootic situation with Blue Tongue in some member states it is possible NVS to order taking of blood samples from susceptible animals originating from affected countries. For control inside the country it is foreseen 500 samples to be taken from bovine animals bred within 20 km zone around holdings where BT susceptible animals coming from affected countries are kept.

- Measures in case of suspected presence of bluetongue.

In case of bluetongue suspicion the measures laid down in the article 4 of Directive (EC) 2000/75 for prevention, control and eradication of bluetongue are enforced.

4.2. Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme¹⁵.

4.2.1. Department "Contagious diseases" within Directorate "Animal health" at the Headquarters of NVS has the following responsibilities:

1. To draft the programme for surveillance of bluetongue in ruminants and to submit it for approval to the European Commission.
2. To control the implementation of the surveillance programme.
3. To collect and analyse the data on the sentinel animals tested for bluetongue.
4. In case of disease outbreak – to test the ruminants in the protection and surveillance zones.
5. To summarize the data on seropositive animals.
6. To summarize data on the costs of surveillance from the regions with sentinel animals.
7. To keep a register in the database of all holdings with ruminants free of bluetongue.
8. To send annual report to the European Commission containing the data referred to in points 1-7.

4.2.2. At regional level the Regional Veterinary Services and the heads of departments "Animal health" have the following responsibilities:

1. To control the implementation of the bluetongue surveillance programme at regional level.
2. To collect and analyse the data on the animals tested for bluetongue in the region.
3. To summarize the data on seropositive animals.
4. To summarize the data on seropositive wild animals.
5. To summarize the data on the bluetongue surveillance costs incurred at regional level.
6. To keep a register in the database of all holdings with ruminants free of bluetongue.
7. To collect and send samples for species and quantity determination of caught culicoides.
8. To send annual reports containing the data referred to in points 1-7 to Directorate "Animal health" at NVS.

4.2.3. The municipal veterinarians have the following responsibilities:

1. To control the implementation of the programme for surveillance of bluetongue in the relevant municipality.
2. To control the sampling and the sending of samples from sentinel animals.
3. To collect and analyse the data on the animals tested for bluetongue in the veterinary units located on the territory of the relevant municipality.

¹⁵ Describe the authorities charged with supervising and coordinating the departments responsible for implementing the programme and the different operators involved.
Describe the responsibilities of all involved.

4. To summarize the data on seropositive animals (domestic and wild) from the veterinary units located on the territory of the relevant municipality.
5. To summarize the data on the bluetongue surveillance costs incurred by the relevant municipality.
6. To keep a register in the database of all holdings with ruminants free of bluetongue.
7. To send annual reports containing the data referred to in points 1-6 to Directorate "Animal health" at the relevant RVS.

4.2.4. The veterinary private practitioners have the following responsibilities:

1. To take and send samples for bluetongue testing.
2. To collect and analyse the data on the tested ruminants for bluetongue from the animal holdings located on the territory of the relevant veterinary unit.
3. To summarize data on seropositive animals from the animal holdings located within the relevant veterinary unit.
4. To summarize the data on the bluetongue surveillance and eradication costs incurred at the level of the respective veterinary unit.
5. To create a list of registered ruminant holdings free of bluetongue.
6. To send annual reports to the municipal veterinarian containing the data referred to in points 1-5.

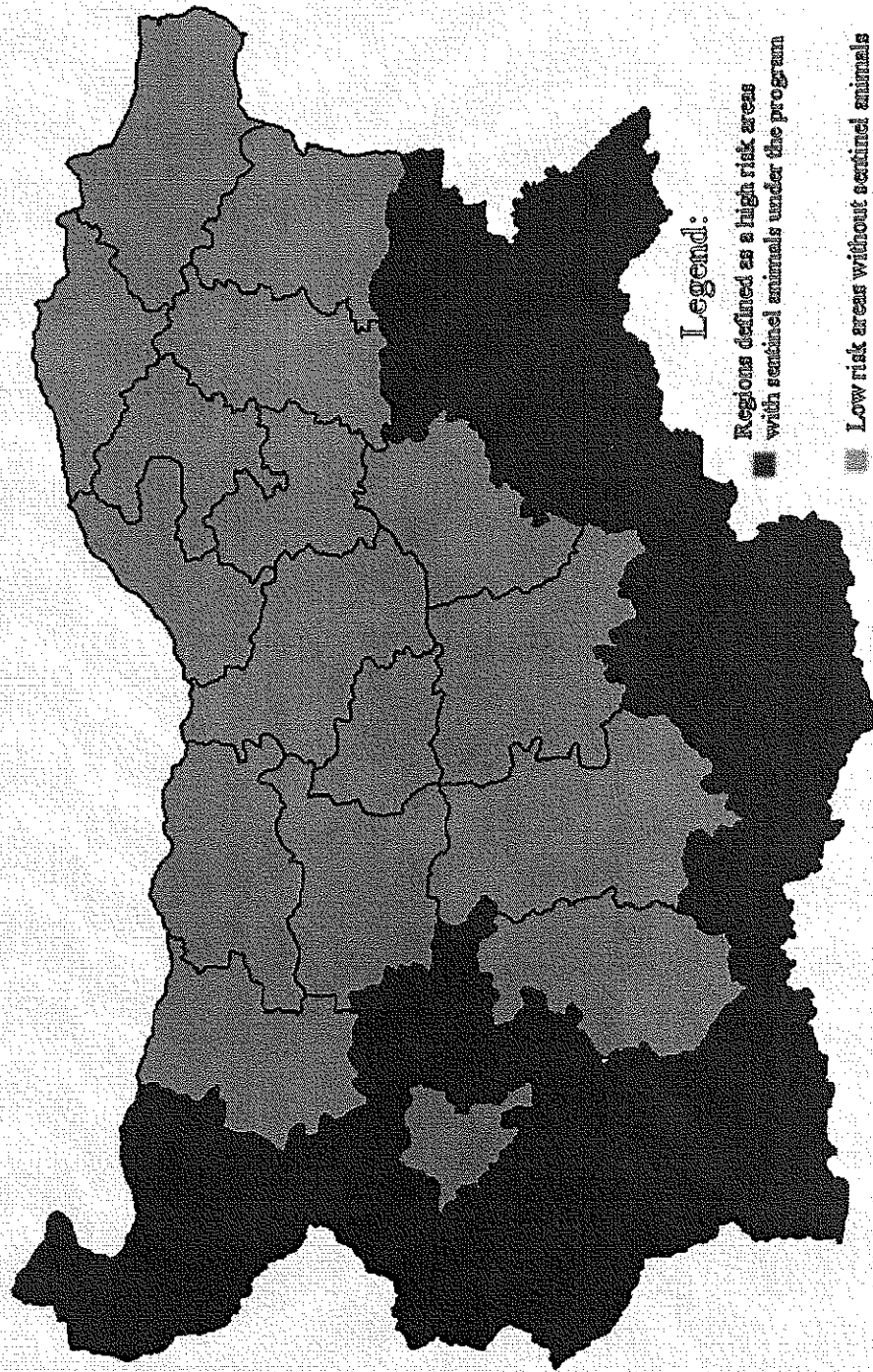
4.2.5. Diagnostics: performed only by the Reference Laboratory for exotic diseases at the National Diagnostic Research Veterinary Institute in Sofia. The National Diagnostic Research Veterinary Institute (NDRVI) in Sofia, Laboratory for Arachnontomology is responsible for quality and quantitative determination of the vectors.

4.3. Description and delimitation of the geographical and administrative areas in which the programme is to be implemented⁸.

The programme will be implemented in the regions defined as high risk areas like: Burgas, Yambol, Haskovo, Kargali, Smolyan, Blagoevgrad, Kjustendil, Pernik, Sofia region, Montana and Vidin. In addition 500 blood samples will be taken from the bovines within 20 km zone around holdings or collection centers where BT susceptible animals coming from affected countries are kept. In this way control of the disease will be carried out in the inside parts of the country.

⁸ Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

Map of Republic of Bulgaria



Map.1. Regions defined as BT high risk areas

4.4. Measures implemented under the programme⁹

4.4.1. Measures and terms of legislation as regards the registration of holdings:

According to Art. 51 of the Law on Veterinary Activities the animals are subject to identification and the animal holdings – to registration by NVS and Regulation 1760/2000 on the terms and conditions for identification of animals, registration of animal holdings and access to the database for animal identification and registration, implementing Regulation 21/2004.

4.4.2. Measures and terms of legislation as regards the identification of animals¹⁰:

According to Art. 51 of the Law on Veterinary Activities the animals are subject to identification and the animal holdings – to registration by NVS and Ordinance No 61 on the terms and conditions for identification of animals, registration of animal holdings and access to the database for animal identification and registration, implementing Directives 2001/84 and 92/102.

4.4.3. Measures and terms of legislation as regards the notification of the disease:

Art. 124 of the Law on Veterinary Activities and Ordinance No 23 of 14.12.2005 laying down the terms and conditions for notification and registration of contagious diseases of animals implementing EU Directive No82/894.

4.4.4. Measures and terms of legislation as regards the measures in case of a positive result¹¹:

According to Art. 47, par. 1 of the Law on Veterinary Activities the NVS implements measures for prevention, control and eradication of diseases, including movement bans..

According to Art. 45, par. 3, p. 1 of ORDINANCE No 19 of 14.12.2005 for prevention, control and eradication of bluetongue in ruminants implementing Directive 2000/75/EC.

4.4.5. Measures and terms of legislation as regards the different qualifications of animals and herds:

⁹ Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.
¹⁰ Not applicable for poultry

¹¹ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around the infected holding, ...).

It is carried out in accordance with the Ordinance laying down the terms and conditions for spending the funds allocated to cover the epizootic risks.

According to Art. 6, par. 1 and par. 2 of the same Ordinance a distinction is made between stock and pedigree breeding animals.

4.4.6. Control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas concerned¹²
According to Art. 47, par. 2 of the Law on Veterinary Activities restrictive measures are imposed with regard to the movement of infected animals.

4.4.7. Measures and terms of legislation as regards the control (testing and vaccination) of the disease:
ORDINANCE No 19 of 14.12.2005 for prevention, control and eradication of bluetongue in ruminants

4.4.8. Measures and terms of legislation as regards the compensation for owners of slaughtered and killed animals:
According to the Ordinance laying down the terms and conditions for spending the funds allocated to cover the epizootic risks, compensations are paid to the owners of the emergency killed or slaughtered animals.

5. General description of the costs and benefits¹³ :

1. Costs of sampling and transportation of samples for testing to the National Reference Laboratory for exotic diseases in Sofia.
2. Costs for purchase of necessary diagnostic kits.
3. Cost of compensations payable to the owners of emergency slaughtered and killed ruminants.0
4. Costs of remunerations for the people implementing the programme.
5. Surveillance of the bluetongue disease and disease eradication in case of outbreak.
6. In case of vaccination – cost for vaccines.

6. Data on the epidemiological evolution during the last five years¹⁴

6.1. Evolution of the disease

6.1.1. Data on evolution of the disease¹⁵

¹²

A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas is provided.

¹³

A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.

¹⁴

The data on the evolution of the disease are provided according to the tables below where appropriate.

During the last five years no BT virus have been detected in Bulgaria. At the beginning of October 2006 as a result of the testing of samples from sentinel animals under the surveillance programme, bluetongue seropositive animals not showing clinical signs of the disease were found in the region of Burgas near the border with the Republic of Turkey. Since then no seropositive animals have been detected on the territory of the country.

6.2. Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests (one table per year and per disease/species)

Year: 2010 /Period: 01.03.2010 – 30.11.2010/ Disease^(a): bluetongue Animal species/category^(b): bovines

Description of the used serological tests: competitive ELISA

Description of the used microbiological or virological tests: none

Description of the other used tests: none

Plan for BT serological surveillance in 2010 - /Period: 01.03.2010 – 30.11.2010/

Region	Total No of serological samples from bovines to be tested for the region	No of samples per month to be tested	From the following Settlements
Burgas	495	55	Malko Tarnovo – 20 bovines Sredetz - 20 bovines Belevren – 15 bovines
Yambol	405	45	Village of Krainovo - 15 bovines Mamarchevo -15 bovines Lesovo - 15 bovines
Haskovo	405	45	Matochina – 15 bovines Svilengrad – 15 bovines Kobilino - 15 bovines
Kardjaly	405	45	_Chernichevo – 15 bovines Kirkovo - 15 bovines

<u>Smolyan</u>	405	45	Thokachka - 15 bovines Zlatograd - 15 bovines Poljana - 15 bovines Arda - 15 bovines
<u>Blagoevgrad</u>	675	75	Hadjidimovo –15 bovines Marikosteno – 15 bovines Petrich - 15 bovines Kresna - 15 bovines Padesh - 15 bovines
<u>Kjustendyl</u>	315	35	Palatykovo - 15 bovines Dragovistiza –15 bovines Trekljno - 10 bovines
<u>Pernik</u>	135	15	Trun - 15 bovines
<u>Sofia</u>	270	30	Dragoman - 15 bovines Godech - 15 bovines
<u>Montana</u>	270	30	Berkovitzta – 15 bovines Chiprovtsi - 15 bovines
<u>Vidin</u>	360	40	Chuprene - 15 bovines Bregovo - 15 bovines
<u>Other</u>	500		
Total	4640		Serological samples

Remark: In addition 500 blood samples will be taken from the bovines within 20 km zone around holdings or collection centers where BT susceptible animals coming from affected countries are kept. In this way control of the disease will be carried out in the inside parts of the country.

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests: **bluetongue surveillance on the territory of the Republic of Bulgaria.**

7.1.1.1. Number and specification of tests: **Competitive ELISA**

Disease (a): **Bluetongue** Animal species: **bovines**

8. Detailed analysis of the cost of the programme¹⁶ for the period 01.04.2009 - 30.10.2009

Costs related to	Specification	Number of units	Unitary cost in euro	Total amount in euro	Community funding requested (yes/no)
<i>1. Testing</i>					
1.1. Cost of the analysis	Competitive ELISA	4 640	2,5	11 600	yes
1.2. Cost of sampling		4 640	0,20	928	yes
1.3. Other costs – packaging and transportation of samples to the laboratories		4 640	0,25	1 160	yes
Total:				13 688	yes

Total amount requested for the programme for surveillance of bluetongue - 13 688 euro.

¹⁶ Fixed costs should not be included. All amounts are VAT excluded.