



SANCO/10232/2013

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

## **Eradication and monitoring programme for Bluetongue**

**Romania**

**Approved\* for 2013 by Commission Decision 2012/761/EU**

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

## **Surveillance programme for bluetongue Romania**

**- Year 2013 -**

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

Member State: Romania

Disease: Bluetongue

Request of Community co-financing for: 2013

Reference of this document: ...../ .04.2012

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## **Introduction**

Bluetongue (BT) is an infectious, noncontagious disease of domestic and wild ruminants. It is a vector borne disease and the biologic vectors of the bluetongue virus (BTV) some species of insects belonging to the genus Culicoides.

Usually, the virus can be introduced into a free area with infected ruminants originating from countries or zones where virulent virus strains are present or with infected vectors that can reach new free of the disease areas.

BT is worldwide spread and it is thought that the endemic areal of BTV is limited by the 40-50° N and 35° S latitudes. In 2006 BTV disseminated towards the north of Europe affecting Netherlands, Belgium, Germany, Luxembourg.

This new situation demonstrated that the majority of the European countries are exposed to the risk for bluetongue, not only the states from the Mediterranean basin.

The previous serologic and entomologic studies performed by the present in Romania showed that almost 70% of the territory of the country is at risk for BTV infection.

## **2. Historical data on the epidemiological evolution of the disease: The disease never occurred in Romania.**

In Romania the surveillance of bluetongue was applied since year 2000 in the frame of the annual Programme for the surveillance, prophylaxis and control of animal diseases, of zoonotic diseases and environment protection.

The objectives of bluetongue surveillance were the following:

- Early detection of any evidences of bluetongue occurrence on Romanian territory
- Urgent and efficient intervention in case of a bluetongue outbreak
- Establishing of breeding and survival sites for bluetongue virus vectors
- Establishing of the risk zones for bluetongue in Romania
- Fulfilling of the requirements of the Terrestrial Animals Health Code Chapter 2.2.13. Article 2.2.13.2. which stipulates that “A country or a *zone* may be considered free from BTV when bluetongue is notifiable in the whole country and either:
  1. the country or *zone* lies wholly north of 50°N or south of 34°S, and is not adjacent to a country or *zone* not having a free status; or
  2. a surveillance programme in accordance with Appendix 3.8.X. has demonstrated no evidence of BTV in the country or *zone* during the past 2 years; or
  3. a surveillance programme has demonstrated no evidence of Culicoides likely to be competent BTV vectors in the country or *zone*.”

### ***Components of the strategy***

#### **2.1. Passive surveillance by:**

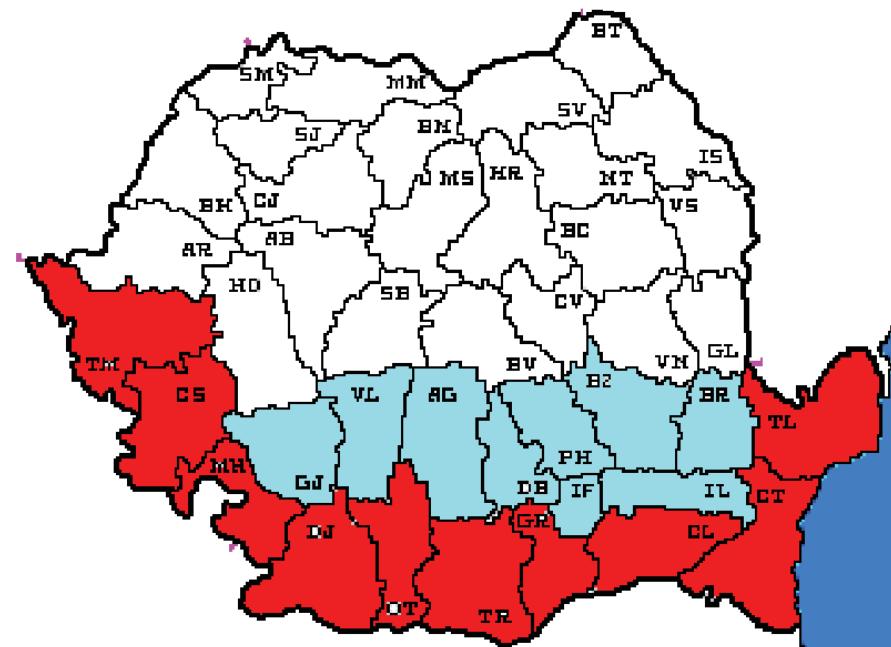
Monitoring of the documents.

#### **2.2. Active surveillance by:**

- Inspection of animals belonging to domesticated or wild species, susceptible to the BT virus, existing on Romanian territory, as follows:
  - in “target” localities located in districts considered to present a major or lower risk for trans boundary contamination;

- in “quarantine farms” for imported or exported animals, during a period of time equally to the maximum incubation period of the disease;
  - Inspection in slaughterhouses of all susceptible animals originating from “target” localities or from import “quarantine farms”;
  - Monitoring of culicoid vectors, identifying the genus and the species as follows:
- by capturing the insects with mobile light traps, during the activity season of the insects (from May to October);
- by weekly catches with permanent traps, covering the whole territory of the country (one permanent trap per district) and all over the year.
  - Serological survey, to detect the eventual trans boundary contamination, as follows:
- in districts considered to present high risk of contamination (CS, CL, CT, DJ, GR, OT, MH, TL, TM, TR), located in the southern part of the country, very close to the national border, on serum samples collected from a number representing 3% of ruminants, minimum 1200 samples/year/district (figure 1);
- in districts presenting lower risk of contamination (AG, BR, BZ, DB, IF, GJ, IL, Bucharest, PH, VL), in the proximity of the above mentioned districts, on serum samples collected from 2% of ruminants, minimum 400 samples/year/district (figure 1);
- 10% monthly, on sentinel animals in sentinel farms located in areas very closed to the Danube river;
  - Organization of epidemiological activities to asses the health status related to BT of susceptible wild and transhumant animals;
  - In case of an outbreak of bluetongue, the contingency plan is immediately enforced.

Figure 1. Sites of location of the districts considered to present high risk (red) or low risk (blue) of contamination



## **2.3. Serological surveillance during years 2007 - 2011**

### **Year - 2007**

Samples: ruminants sera

Tests: competitive ELISA, AGID

Number of tested samples: 70,569

Positive samples: 0

### **Year - 2008**

Samples: ruminants sera

Tests: competitive ELISA

Number of tested samples: 92,639

Positive samples: 0

### **Year - 2009**

Samples: ruminants sera

Tests: competitive ELISA

Number of tested samples: 72,151

Positive samples: 0

### **Year - 2010**

Samples: ruminants sera

Tests: competitive ELISA

Number of tested samples: 71,232

Positive samples: 0

### **Year - 2011**

Samples: ruminants sera

Tests: competitive ELISA, RT-PCR

Number of tested samples: 73,806

Positive samples: 0

## **2.4. Vectors surveillance during years 2007 – 2011**

### **Year – 2007**

No. of districts – 34

No. of localities (sites) – 34

No. of catches – 430

Identified vectors: Culicoides obsoletus  
Culicoides pulicaris

During 2007, 2008 and 2009 permanent black light traps (South Africa type) were installed in every district (one light trap/district) and vectors were collected weekly (one night/week) in order to assess the seasonal incidence and abundance of the vectors.

In five districts HOBO meteostations were installed in order to monitor the environment parameters that can influence the activity and competence of the vectors (figure 2).

Figure 2. Site of distribution of the permanent traps (red) and HOBO meteostations (yellow) during the season 2007-2008



#### Year – 2008

No. of districts – 32

No. of localities (sites) – 35

No. of catches – 1,279

Identified vectors: *Culicoides oboletus*  
*Culicoides pulicaris*  
*Culicoides nubeculosus*  
*Culicoides dewulfi*

#### Year - 2009

No. of districts – 38

No. of localities (sites) – 38

No. of catches – 1,450

Identified vectors: *Culicoides oboletus*  
*Culicoides pulicaris*  
*Culicoides nubeculosus*  
*Culicoides dewulfi*

Figure 3. Sites of vectors identification in 2009.

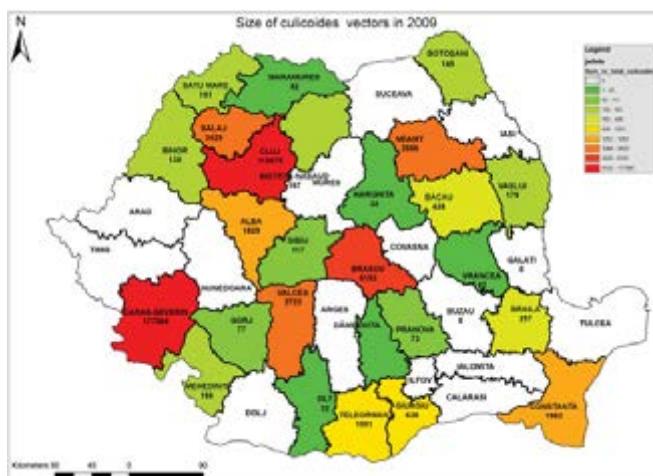


Figure 4. Sites of *C. obsoletus* vectors identification in 2009.



Figure 5. Sites of *C. pulicaris* vectors identification in 2009.



### Year - 2010

No. of districts – 35

No. of localities (sites) – 35

No. of catches – 1,554

Identified vectors: *Culicoides obsoletus*  
*Culicoides pulicaris*  
*Culicoides nubeculosus*  
*Culicoides dewulfi*

### Year – 2011

No. of districts – 38

No. of localities (sites) – 38

No. of catches – 1,573

Identified vectors: *Culicoides obsoletus*  
*Culicoides pulicaris*  
*Culicoides nubeculosus*  
*Culicoides dewulfi*

## **2.5. Results of the surveillance performed during 2007 – 2011**

Based on the investigations performed during 2007 – 2011 risk maps for bluetongue virus were realized. The maps show the areas where competent vectors from *Culicoides oboletus* and *Culicoides pulicaris* exist, up to the altitude of 500 m (figure 6).

Figure 6. Map of favourable environmental conditions for culicoid vectors . *C.oboletus* and *C.pulicaris* (up to 500m altitude)

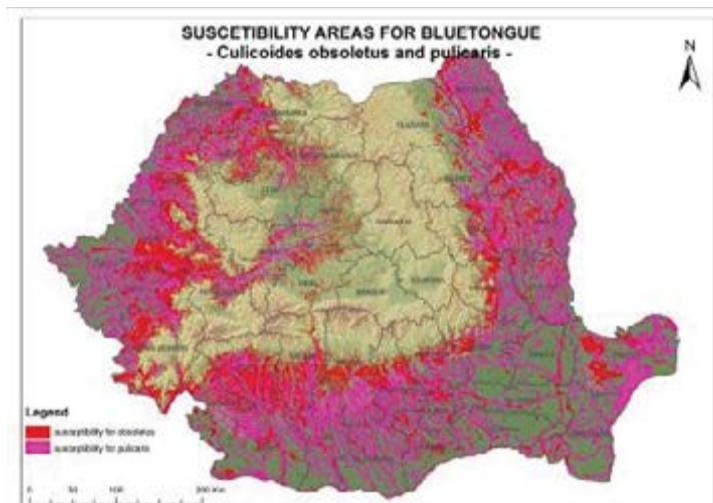
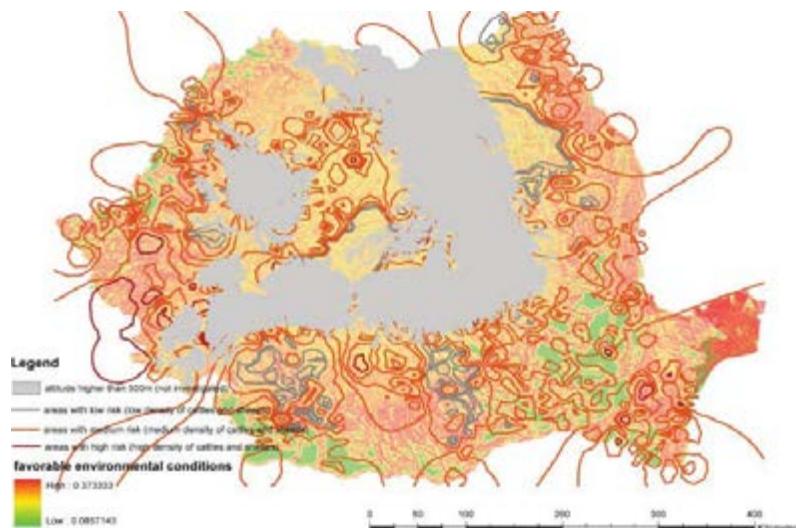


Figure 7. Map of risk areas for bluetongue (up to 500m altitude)



## **3. Description of the submitted program**

### **3.1. Objectives of the bluetongue surveillance programme in 2013:**

- Early detection of any evidences of bluetongue occurrence on Romanian territory;
- Immediate and efficient intervention in case of a bluetongue outbreak;
- Establishing of breeding and survival sites for bluetongue virus vectors;
- Establishing of the risk zones for bluetongue in Romania;
- Qualification of domesticated ruminants populations in Romania as “free of bluetongue”.

The target herds were established into quadrates of 25/25 kms recte 625 square kms during the season May to November (figure 8) and 50/50 kms recte 2500 square kms, from December to April (figure 9) depending of the season of vectors activities.

Figure 8. Quadrates of 25/25 kms for target localities from Mai-November

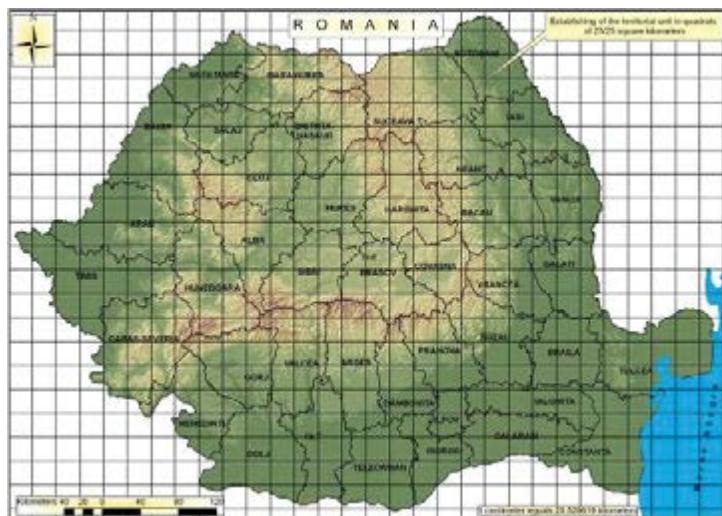


Figure 9. Quadrates of 50/50 kms for target localities from December to April



#### Testing strategy:

- from May to November: monthly surveillance by competitive ELISA on serum samples taken from susceptible animals (bovines, ovines, goats) in order to assure a detection of virus circulation at a level of 20% prevalence with 95% confidence;
- from December to April: monthly surveillance by competitive ELISA on serum samples taken from susceptible animals (bovines, ovines, goats) in order to assure a detection of virus circulation at a level of 20% prevalence with 95% confidence;

### **3.2. Serological survey**

In Romania, the estimated number of ruminants at risk for bluetongue is the following

- bovines: 2,165,915
- sheep: 11,891,816
- goats: 1,702,778

The estimated number of ruminants that should be surveyed by serology and Real Time RT - PCR in 2013 is 52,400.

During the intense activity of the vectors (from May to November): 39,200 of ruminants will be tested by ELISA competitive (an average of 980 serum samples/county)

Table 1. Sampling model from May to November

Number of quadrats of 25 /25km ( 625 km )	400
Average number of target herds per county	10
Average number of samples /county/period	980
Average number of samples/target herds/month	14
Total number of samples to be tested during the period	39,200

During the low activity season of vectors (from December to April) 11,200 of ruminants will be tested by ELISA competitive (an average of 280 serum samples/county).

Table 2. Sampling model from December to April

Number of quadrats of 50 /50km ( 2500 km )	160
Average number of target herds per county	4
Average number of samples /county/period	280
Average number of samples/target herds/month	14
Total number of samples to be tested during the period	11,200

Table 3. Sampling model for Real Time RT-PCR testings

Average number of samples /county/year	50
Total number of samples to be tested during the period	2,000

The methodology for establishing the target herds to collect the serum samples is the same applied for the year 2012.

All serum samples will be tested in district veterinary laboratories.

The test to be used for serologic surveillance is competitive ELISA.

### **3.3. Monitoring of culicoid vectors**

Identification of the genus and the species and seasonal abundance and distribution as follows:

- by capturing the insects with mobile light traps, during the activity season of the insects (from May to November) according to a monthly timetable for each capturing site (table 4);

Table 4. Monthly timetable of vectors collections by mobile traps

Black light trap code	Days of the month ( from May to November)																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
CMYYYYZZ**	*						*							*								*									

\* Days of capturing

\*\* CM = Mobile light trap: YYYY= the name in short of the locality of collection site; ZZ= the acronym of the district name. Example: the code CPVORBT means: mobile light trap located in Vorona village, district Botosani.

- by weekly catches with permanent traps, covering the whole territory of the country (one permanent trap per district) and all over the year (table 5).

Table 5. Weekly timetable of vectors collections by permanent traps

Black light traps code	The name of the farm of collection site	Catching interval
XXYYYYZZ*	.....	One night/week January → December

Black light traps type South Africa will be used.

### 3.4. Monitoring of environmental parameters with HOBO meteostations

In district Botosani HOBO meteostation is installed. The stations record the environmental data every hour. All the data stocked in the HOBO dataloger are transferred every month to a laptop and used for spatial and statistic analyses and correlated with the dimension and structure of the vectors populations in order to quantify the influence of the environmental factors on the biology of the insects.

### 3.5. Surveillance on wild ruminants

Laboratory tests (virology and molecular biology) are applied on found dead wild ruminants or sick animals killed by shooting because they show symptoms that might be attributed to bluetongue, in order to collect useful data for epidemiological and risk analysis. Close collaboration with forestry administration and hunting associations is enforced.

## 4. Measures of the submitted programme

### 4.1. Summary of measures under the programme

Duration of the programme: 1 year

Control

- Testing- yes
- Slaughter of positive animals
- Killing of positive animals
- Vaccination
- Treatment
- Disposal of products
- Monitoring or surveillance - yes
- Eradication
- Slaughter of positive animals
- Killing of positive animals
- Extended slaughter or killing
- Disposal of products
- Other measures (specify):

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

- In Romania, the **National Sanitary Veterinary and Food Safety Authority** (NSVFSA) is the authority that approves and coordinates the national programme for monitoring, surveillance and control of bluetongue. NSVFSA it assures the necessary amount of money for granting compensations for the animals owners within 90 days, in accordance with European legislation, in limits of allocate budget.

The National Sanitary Veterinary and Food Safety Authority is led by its President, State Secretary, and the headquarter is located in Bucharest, Piața Presei Libere no. 1, Corp D1, district 1, postal code 013701, phone: 0040374150200, fax: 0040213124967, e-mail: [office@ansvs.ro](mailto:office@ansvs.ro).

At the county level, the departments responsible for the implementing of the programme are the **42 County Sanitary Veterinary and Food Safety Directorates (CSVFSA)**.

#### **Institute for Diagnosis and Animal Health**

- it establishes the strategy of County and Bucharest Municipality Sanitary Veterinary and Food Safety Laboratories regarding the surveillance and diagnosis of bluetongue;
- it coordinates the laboratory activity of surveillance and diagnosis of bluetongue;
- it makes up epidemiological reports, based on the interpretation of the results regarding bluetongue;
- it cooperates with The Laboratory of Community Reference for bluetongue.

#### **Sanitary Veterinary and Food Safety Laboratories (S.V.F.S.L.)**

There are 41 county official laboratories (**S.V.F.S.L.**).

- Laboratory examination in the frame of the programme under technical supervision of NRL.

#### **The Institute for the Control of Biological Products and Medicine of Veterinary Use**

- it authorizes medical immunological products against bluetongue and reagents (kits) that are to be traded in Romania;

- it carries out the control of series of vaccine quality against bluetongue, in conformity with the provisions of Surveillance, prevention and control actions of animal diseases, of those transmissible from animals to people, animal and environment protection, approved by The NSVFSA ‘President ‘Order.

#### **The Ministry of Agriculture and Rural Development**

- it elaborates the strategy regarding the domestic ruminants breeding system from Romania;
- it assures the maintenance of wild ruminants livestock within reasonable limits and area, by carrying out the seasonal hunting;
- it assures the sampling and their submission to laboratory in order to achieve the laboratory surveillance for the diagnosis of bluetongue, according to the approved sampling programs;
- it assures together with the Ministry of Environment and Sustainable Development and NSVFSA the functioning if collection, transport and neutralizing system for corpses, products and by-products;
- it decides, together with the Ministry of Public Health over the conditions of breeding animals in cities and municipalities.

#### **General Directorate of Forestry and Hunting Control**

- it monitors the population of wild ruminants from Romania, the predicted evolvements and draws up strategies of maintaining livestock within reasonable limits, so that the circulation of virus be controlled;
- it monitors and controls the implementing of measures for the managers of hunting areas, according to the Program;
- it draws up methodologies specific of the field of activity for the control and surveillance of bluetongue for wild ruminants from Romania.

#### **The Territorial Forestry and Hunting Inspectorates**

- it makes available the catagraph of wild ruminants to the County and Bucharest Municipality Sanitary Veterinary and Food Safety Directorates, and geographical coordinates of hunting funds for draw up the GIS maps;
- it monitors and asses the density of wild ruminants from the hunting area of Romania;
- it monitors and controls the implementing of measures for the managers of hunting funds;
- it cooperates with the County and Bucharest Municipality Sanitary Veterinary and Food Safety Directorates in order to implement the Program.

#### **The Economy and Finance Ministry**

- it assures the necessary funds for the complete implementation of the Program.

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

The programme will be applied to the whole territory of Romania.

Fig. 10. Administrative map of Romania with the 41 counties and the municipality of Bucharest:



#### **4.4. Description of the measures of the programme:**

##### **4.4.1. Notification of disease:**

- Order 77/2005 for the approval of the Sanitary Veterinary Norm regarding the notification of animal diseases, with all subsequent amendments, for the official transposition of Council Directive 82/894/EEC on the notification of animal diseases within the Community, published in the Official Journal of Romania, no. 964/31 October 2005.

##### **4.4.2. Target animals and animal population:**

The programme is targeted to randomly selected domesticated ruminants.

##### **4.4.3. Identification of animals and registration of holdings:**

- Emergency Government Ordinance no. 108/2001 approved through Law no. 166/10.04.2002 regarding agricultural holdings which settles at Chapter II – „The apportion of the commercial agricultural holdings“, whose implementation is made in conformity with provisions of the Governmental Decision no. 49/2002 for the approval of Methodological Norms for application of the provisions of Emergency Government Ordinance no. 108/2001 regarding agricultural holdings, published in the Official Journal of Romania, Part I, no. 256/16 April 2004, with further amendments.
- Order no. 16 of 16th March 2010 on the approval of „sanitary veterinary Norm regarding the procedure for the sanitary-veterinary registration/authorization of establishments/ assembly centre/holdings of origin and of means of transport in the field of animal health and welfare, of the establishments involved in the storage and neutralization of animal by products which are not intended for human consumption and of processed products”, published in the Official Journal of Romania, Part I, no. 194 of 26 March 2010, which repeals Order no. 62/2007, with further amendments.

- Commission Regulation (EC) No 911/2004 of 29 April 2004 implementing Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards ear tags, passports and holding registers, with further amendments.
- Council Regulation (EC) of 21 December 2004 establishing a system for the identification and registration of ovine and caprine animals and amending Regulation (EC) No 1782/2003 and Directives 92/102/EEC and 64/432/EEC, with further amendments.
- Order 40/2010 on the approval sanitary veterinary Norm regarding the implementation process of identification and registration of swine, bovine, sheep and goat, published in the Official Journal of Romania, no. 286/30 April 2010, with further amendments.

#### **4.4.4. Qualification of animals and herds:**

All domesticated ruminants in Romania are free of bluetongue.

#### **4.4.5. Rules on the movement of animals:**

The movement of ruminants is controlled with the following documents:

- animal holding registry;
- animal movement document;
- sanitary veterinary certificate for live animals.

The ruminants are allowed to move from farm to farm, animal collection centers, animal markets, slaughterhouses or rendering plants accompanied by the above mentioned documents. These movements are registered in the database along with all relevant documents.

#### **4.4.6. Tests used and sampling schemes:**

Competitive ELISA and Real Time – RT PCR. The sampling scheme was described in point 3.2.

#### **4.4.7. Vaccination used and vaccination schemes:**

Not applicable.

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

Order no. 34/2009 on the approval sanitary veterinary Norm regarding general bio-security rules in bovine holdings, published in the Official Journal of Romania, no. 420/19 June 2009.

#### **4.4.9. Measures in case of positive result:**

Animals serologically positive will be further retested by serum neutralisation and real time RT-PCR on serum and blood samples.

#### **4.4.10. Compensation scheme for owners of slaughtered and killed animals:**

- Governmental Decision 1214/2009 regarding methodology for determining and paying compensation to owners of slaughtered animals, killed or otherwise affected in order to rapid elimination of transmissible animal disease outbreaks, published in the Official Journal of Romania, no. 741/9 November 2009.

#### **4.4.11. Control on the implementation of the programme and reporting:**

The control of implementing of the programme is performed by the inspection body according to the National Inspection and Control Programme, which is part to Multi-annual National Control Plan.

Reporting of the surveillance results is performed every month by the district Sanitary Veterinary and for Food Safety Directorates to the National Reference Laboratory for bluetongue in the Institute for Diagnosis and Animal Health by „RO BT-Net” network.

#### **5. Benefits of the programme:**

Romania considers that it is necessary to rapidly put in place a harmonized BT monitoring and surveillance scheme in the EU. This harmonized system will allow the full and secure implementation of the measures foreseen in Regulation (EC) no. 1266/2007 on implementing rules for Council Directive 2000/75/EC ensuring transparency among the Member States and also as regards the Third Countries. Council Directive 2000/75/EC of 20 November 2000 laying down specific provisions for the control and eradication of bluetongue. Directive 2012/5/EU of the European Parliament and of the Council of 14 March 2012 amending Council Directive 2000/75/EC as regards vaccination against bluetongue.

The serological monitoring will allow to qualify the ruminants in Romania as free of bluetongue and therefore the farmers will be able to export animals.

On the other hand an early detection of any incursion of BTV into Romanian territory could be rapidly jugulated by the veterinary administration.

The identification of bluetongue risk areas in Romania, will allow to the veterinary services to enforce the prophylactic action in those areas.

## **6. Data on the epidemiological evolution during the last five years**

### **6.1. Evolution of the disease**

**6.1.1.** Data on herds (a) (one table per year and per disease/species)

Year: 2007, disease: Bluetongue, Situation on date 31.12.2007, Animal species: Bovine.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators		
								%herd coverage	%positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3		4	5	6	7		8	9
Romania (42 districts)	4,365	400		0	0	0	0		100	0

Year: 2008, disease: Bluetongue, Situation on date 31.12.2008, Animal species: Bovine.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators		
								%herd coverage	%positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3		4	5	6	7		8	9
Romania (42 districts)	394,000	537		640	0	0	0		119	0

Year: 2009, disease: Bluetongue, Situation on date 31.12.2009, Animal species: Bovine.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators
1	2	3	4	5	6	7	8	%herd coverage %positive herds Period herd prevalence %new positive herds Herd incidence
Romania (42 districts)	8,661 <sup>1</sup>	563	559	0	0	0	99.29	0 0 0

Year: 2010, disease: Bluetongue, Situation on date 31.12.2010, Animal species: Bovine.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators
1	2	3	4	5	6	7	8	%herd coverage %positive herds Period herd prevalence %new positive herds Herd incidence
Romania (42 districts)	9,297	541	541	0	0	0	100	0 0 0

Year: 2011, disease: Bluetongue, Situation on date 31.12.2011, Animal species: Bovine.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators
1	2	3	4	5	6	7	8	%herd coverage %positive herds Period herd prevalence %new positive herds Herd incidence
Romania (42 districts)	10,465 <sup>2</sup>	545	548	0	0	0	100.55	0 0 0

<sup>1</sup> Target herds  
<sup>2</sup> Target herds

Year: 2007, disease: Bluetongue, Situation on date 31.12.2007, Animal species: Sheep and goats.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators
1	2	3	4	5	6	7	8	11
Romania (42 districts)	6,090	510	510	0	0	0	100	0

Year: 2008, disease: Bluetongue, Situation on date 31.12.2008, Animal species: Sheep and goats.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators
1	2	3	4	5	6	7	8	11
Romania (42 districts)	1,118,527	1647	735	0	0	0	44.62	0

Year: 2009, disease: Bluetongue, Situation on date 31.12.2009, Animal species: Sheep and goats.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators
1	2	3	4	5	6	7	8	11
Romania (42 districts)	8,661	535	512	0	0	0	95.70	0

Year: 2010, disease: Bluetongue, Situation on date 31.12.2010, Animal species: Sheep and goats.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators		
								%herd coverage	%positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8	9	10	11
Romania (42 districts)	9,288	485	483	0	0	0	99.58	0	0	0

Year: 2011, disease: Bluetongue, Situation on date 31.12.2011, Animal species: Sheep and goats.

Region	Total number of herds	Total number of herds under the program	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	%positive herds depopulated	Indicators		
								%herd coverage	%positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8	9	10	11
Romania (42 districts)	10,452	475	478	0	0	0	100.63	0	0	0

### 6.1.2. Data on animals (one table per year and per disease/species)

Year: 2007, Disease: Bluetongue, Situation on date: 31.12.2007, Animal species: Bovine

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested individually	Number of positive animals	Number of positive animals slaughtered or culled	% coverage at animal level	slaughtered		indicators	
							Total number of animals with positive results slaughtered or culled	% positive animals	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9	100	10
Romania (42 districts)	2,750,000	47,000	47,046	47,046	0	0	0	0	0	0

Year: 2008, Disease: Bluetongue, Situation on date: 31.12.2008, Animal species: Bovine

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested individually	Number of positive animals	slaughter		% positive animals Animal prevalence
					Number of animals slaughtered or culled	% coverage at animal level	
1	2	3	4	5	6	7	10
Romania (42 districts)	2,328,842	39,000	54,082	54,082	0	0	0

Year: 2009, Disease: Bluetongue, Situation on date: 31.12.2009, Animal species: Bovine

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested individually	Number of positive animals	slaughter		% positive animals Animal prevalence
					Number of animals with positive results slaughtered or culled	% coverage at animal level	
1	2	3	4	5	6	7	10
Romania (42 districts)	1,939,095	51,850	44,975	44,975	0	0	0

Year: 2010, Disease: Bluetongue, Situation on date: 31.12.2010, Animal species: Bovine

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested individually	Number of positive animals	slaughter		% positive animals Animal prevalence
					Number of animals with positive results slaughtered or culled	% coverage at animal level	
1	2	3	4	5	6	7	10
Romania (42 districts)	2,010,543	45,301	41,655	41,655	0	0	0

Year: 2011, Disease: Bluetongue, Situation on date: 31.12.2011, Animal species: Bovine

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	slaughter		indicators	
						Number of animals with positive results slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4		5	6	7	8	10
Romania (42 districts)	2,107,624	45,286	42,934		42,934	0	0	94.81	0

Year: 2007, Disease: Bluetongue, Situation on date: 31.12.2007, Animal species: Sheep and goats

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	slaughter		indicators	
						Number of animals with positive results slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4		5	6	7	8	10
Romania (42 districts)	11,946,166	23,500	23,523		23,523	0	0	100	0

Year: 2008, Disease: Bluetongue, Situation on date: 31.12.2008, Animal species: Sheep and goats

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	slaughter		indicators	
						Number of animals with positive results slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4		5	6	7	8	9
Romania (42 districts)	10,624,560	22,000	31,646		31,646	0	0	144	10

**Year: 2009, Disease: Bluetongue, Situation on date: 31.12.2009, Animal species: Sheep and goats**

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Sheep and goats			% positive animals Animal prevalence	indicators
					Number of positive animals	Number of animals with positive results slaughtered or culled	Total number of animals slaughtered		
1	2	3	4		5	6	7	8	9
Romania (42 districts)	9,403,269	32,360	27,124	27,124	0	0	0	83.82	10

**Year: 2010, Disease: Bluetongue, Situation on date: 31.12.2010, Animal species: Sheep and goats**

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Sheep and goats			% positive animals Animal prevalence	indicators
					Number of positive animals	Number of animals with positive results slaughtered or culled	Total number of animals slaughtered		
1	2	3	4		5	6	7	8	9
Romania (42 districts)	10,624,583	35,415	29,577	29,577	0	0	0	83.51	10

**Year: 2011, Disease: Bluetongue, Situation on date: 31.12.2011, Animal species: Sheep and goats**

Region	Total numbers of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Sheep and goats			% positive animals Animal prevalence	indicators
					Number of positive animals	Number of animals with positive results slaughtered or culled	Total number of animals slaughtered		
1	2	3	4		5	6	7	8	9
Romania (42 districts)	11,077,185	31,733	29,402	29,402	0	0	0	92.65	10

**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: 2007, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Bovine.

Region	Number of sampled tested	Serological tests
Romania (42 districts)	47,046	0

Year: 2008, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Bovine.

Region	Number of sampled tested	Serological tests
Romania (42 districts)	54,082	0

Year: 2009, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Bovine.

Region	Number of sampled tested	Serological tests
Romania (42 districts)	44,975	0

Year: 2010, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Bovine.

Region	Number of sampled tested	Serological tests
Romania (42 districts)	41,655	0

Year: 2011, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, RT-PCR, Species: Bovine.

Region	Number of sampled tested	Serological tests
Romania (42 districts)	44,140	0

Year: 2007, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Sheep and goats.		
Region	Serological tests	
	Number of sampled tested	Number of positive samples
Romania (42 districts)	23,523	0

Year: 2008, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Sheep and goats.		
Region	Serological tests	
	Number of sampled tested	Number of positive samples
Romania (42 districts)	31,646	0

Year: 2009, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Sheep and goats.		
Region	Serological tests	
	Number of sampled tested	Number of positive samples
Romania (42 districts)	27,124	0

Year: 2010, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, Species: Sheep and goats.		
Region	Serological tests	
	Number of sampled tested	Number of positive samples
Romania (42 districts)	29,577	0

Year: 2011, disease: Bluetongue, Description of the used serological tests: Competitive ELISA, RT-PCR, Species: Sheep and goats.		
Region	Serological tests	
	Number of sampled tested	Number of positive samples
Romania (42 districts)	29,666	0

**6.3.** Data on infection (one table per year and per disease/species): NOT APPLICABLE

**6.4.** Data on the status of herds at the end of each year: NOT APPLICABLE

**6.5.** Data on vaccination or treatment programmes: NOT APPLICABLE

**6.6.** Data on wildlife: NOT APPLICABLE

**6.6.2. Monitoring of wildlife: NOT APPLICABLE****6.6.3. Data on vaccination or treatment of wildlife: NOT APPLICABLE****7. Targets****7.1. Targets related to testing (one table for each year of implementation)****7.1.1. Targets on diagnostic tests**

Disease: Bluetongue, Animal species: Bovines, Sheep and goats		Target population	Type of sample	Objective	Number of planned tests
Region	Type of the test				
Romania (42 districts)	Competitive ELISA	Bovines, Sheep and goats	serum	Qualification - surveillance	50,400
	Real Time RT-PCR				2,000
Total					52,400

**7.1.2. Targets on testing herds and animals****7.1.2.1. Targets on the testing of herds**

Disease: Bluetongue, Animal species: Bovine + Sheep + Goats						Target indicators		
Region	Total number of herds	Total number of herds under the programme	Number of herd expected to be checked	Number of expected positive herds	Number of new positive herds	% positive herds expected to be depopulated	Expected % herd coverage	% new positive herds expected period herd prevalence
1	2	3	4	5	6	7	8	9
Romania (42 districts)	10,465	560	560	0	0	0	100	0

**7.1.2.2.** Targets on the testing of animals

Disease: Bluetongue, Animal species: Bovine + Sheep + Goats						
Region	Total number of animals	Number of animals under the programme	Number of animals expected to be tested individually	Number of expected positive animals	Number of expected positive animals	Slaughtering
				Number of animals with positive result expected to be slaughtered or culled	Total number of animals with positive result expected to be slaughtered	Expected % coverage at animal level
1	2	3	4	5	6	7
Romania (42 districts)	15,760,509	52,400	52,400	52,400	0	0
					100	100
					0	0

**7.2.** Target on qualification of herds and animals (one table for each year of implementation): NOT APPLICABLE

**7.3.** Target on vaccination or treatment: NOT APPLICABLE

**7.3.1.** Targets on vaccination or treatment: NOT APPLICABLE

**7.3.2.** Target on vaccination or treatment of wild life: NOT APPLICABLE

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

Costs related to	Specification	Number of units	Unitary cost in euro	Total amount in euro	Community funding requested (yes/no)
<b>1. Testing</b>					
1.1. Cost of the analysis	Tests: Competitive ELISA, Real Time RT-PCR	50,400	2.5	126,000	yes
1.2. Cost of sampling	Serum Samples	2,000	20	40,000	yes
1.3. Other costs	Packing and transportation	41,920 10,480	1.6 1.5	67,072 15,720	yes
<b>2. Vaccination or treatment</b>	<b>NOT APPLICABLE</b>				
<b>3. Slaughtered and destruction</b>	<b>NOT APPLICABLE</b>				
<b>4. Cleaning and disinfection</b>	<b>NOT APPLICABLE</b>				
<b>5. Salaries</b>	<b>NOT APPLICABLE</b>				
<b>6. Consumable and specific equipment</b>	<b>NOT APPLICABLE</b>				
<b>7. Other costs</b>					
Entomological survey					
7.1.	Vectors collecting	1500	0.5	750	yes
7.2.	Vectors identification	1500	0.5	750	yes
7.3.	Costs with packing and transportation				
<b>TOTAL</b>				<b>276,492</b>	<b>yes</b>
				<b>EURO</b>	

