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HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit G5 - Veterinary Programmes

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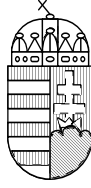
*Programmes for the eradication, control and monitoring of certain
animal diseases and zoonoses*

Survey programme for Bluetongue

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

Hungary

* in accordance with Council Decision 2009/470/EC



**Central Agricultural Office
Animal Health and Animal Welfare Directorate**

HUNGARY

Application

**for Community co-financing of the national control programme
of Hungary for**

Bluetongue

for the year 2012

29th of April, 2011

1. Identification of the programme

Member State: **HUNGARY**

Disease(s): **Bluetongue**

Request of Community co-financing for: **2012**

Reference of this document: **2008/425/EC and 2009/470/EC**

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Date sent to the Commission: **29 April 2011**

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

The first and so far the only Hungarian occurrence of the bluetongue disease was confirmed on 5 Sept 2008. The virus was detected when the obligatory control serological testing was carried out during the isolation period on the animals which were transported from other Member State infected with bluetongue disease:

On 4 July 2008 142 charolais cattle arrived to Borsod-Abaúj-Zemplén County from France. According to the transport documentation all animals were tested serologically with negative result for the bluetongue disease prior to shipment in accordance with the Comm. Reg. 1266/2007/EC. After the arrival the animals were isolated on the farm. Control tests were performed during the isolation period and 47 animals were found to be seropositive and 1 viropositive. The viropositive animal was killed and disposed. The repeated control tests showed that subsequent 17 animals were viropositive out of the 47 seropositive cattle. All viropositive animals were killed and disposed. The seropositive, but virologically negative animals were slaughtered.

Due to the above mentioned results immediate control testing was carried out on the 281 animals originally held on the same Hungarian farm. 4 seropositive cases were found. These animals were subjected to further virological examination, which showed that all of them were positive for the bluetongue virus. These viropositive animals were killed and disposed.

The bluetongue disease was confirmed on 5 Sept 2008. This fact was reported to the European Commission and also to the OIE.

Protection zone and surveillance zone was set up and monitoring tests were ordered to survey the spread of the disease. Movement restrictions were implemented. Disinsectisation was carried out in the zone with a radius of 20 km around the outbreak in order to eliminate the vectors.

On 6 Oct 2008 repeated control serological testing was carried out in the affected herd, and the results showed that 36 cattle out of 450 were seropositive (previously all of them were

seronegative in Sept). PCR testing of the seropositive animals showed that 14 cattle were PCR positive.

Due to the epidemiological risk of the further keeping of this affected herd the National Disease Control Centre decided to kill and dispose all animals kept on the farm, what was carried out in the following month and finished by 17 Nov 2008. The depopulation of the farm was followed by cleaning and disinfection.

The repopulation was permitted by the Local Veterinary Authority more than one year later.

On 19 Jan 2010 the Hungarian Veterinary Authority applied for the Commission's approval for re-demarcation and reduction of the bluetongue restricted zones in Hungary subsequent upon the favourable monitoring results carried out in 2008 and in 2009. The new bluetongue restricted zone was determined around the location of the primary outbreak taking into consideration the Commission's opinion discussed prior to the application. In connection with these modifications, Hungary took the opportunity to lift the bluetongue surveillance zone in Győr-Moson-Sopron county which was set up first in regard with the bluetongue outbreak occurred in the Czech Rep. on 13 Nov 2008 on the farm Ivancice. This surveillance zone was later extended in direction to south in regard with another bluetongue outbreak occurred in the Czech Rep. on 25 Sept 2009 on the farm Násedlovice. In Győr-Moson-Sopron county all serological test results also were negative both in sentinel cattle and in randomly selected individuals in 2008 and in 2009.

In October 2010 the whole territory of Hungary officially regained the bluetongue free status. Since the remaining restricted zone was lifted the sentinel monitoring was stopped, but the monitoring programme for cattle and for the vector species was still ongoing according to the rules to be applied in the free zone.

3. Description of the submitted programme:

3.1. Aim of the submitted programme:

Hungary regained the bluetongue free status in October 2010. But the risk of a new introduction of the disease is still valid since the virus is circulating in many Member States from which cattle are transported to Hungary. The aim of the submitted programme is to demonstrate the absence of certain bluetongue serotypes and to detect the presence of the disease at the earliest stage if new introduction of the bluetongue virus occurs again. The other aim is to continue the monitoring of the vector species in the whole territory of the country.

3.2. Legal background in Hungarian law in force at present:

Hungarian Act No XLVI. 2008 on Food Chain and its official control

Decree No. 41/1997. (V. 28.) of the Ministry of Agriculture on issuing the Animal Health Code.

Detailed rules are prescribed in Decree No 31/2009 of MARD laying down the protective measures against Bluetongue, issued on 27th March, 2009.

3.3. Applied diagnostics and testing methods:

Passive clinical surveillance

The Hungarian and European legislation in force ensures that owners or holders of animals as well as veterinarians must report promptly any suspicion of bluetongue to the competent authority. All suspected cases of bluetongue must be investigated immediately.

Serological surveillance of cattle

The sampling size must be calculated with 5% prevalence and 95% confidence due to the Annex I. point 2.2. of the Comm. Reg. No 1266/2007/EC. With this method the prescribed total number of samples is 1121 per year (59 sample/county). The serological examinations shall be carried out in October or in November:

County	Sample No	Sampling to be carried out
Baranya	59	September
Bács-Kiskun	59	September
Békés	59	October
Borsod-Abaúj-Zemplén	59	October
Csongrád	59	October
Fejér	59	September
Főváros és Pest megye	59	October
Győr-Moson Sopron	59	September
Hajdú-Bihar	59	October
Heves	59	October
Jász-Nagykun-Szolnok	59	October
Komárom Esztergom	59	September
Nógrád	59	October
Somogy	59	September
Szabolcs-Szatmár-Bereg	59	October
Tolna	59	September
Vas	59	September
Veszprém	59	September
Zala	59	September
Total:	1121	

Entomological investigation:

Entomological investigation shall be carried out on the whole territory of Hungary with the following frequency: 1 sample/county/month

From each insect sample genus determination and virological testing is carried out.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme:

First year: 2008

Last year: unknown

√ Control

- √ Testing
- √ Slaughter of positive animals
- √ Killing of positive animals
- Ø Vaccination
- Ø Treatment
- Ø Disposal of products

√ Eradication

- √ Testing
- √ Slaughter of positive animals
- √ Killing of positive animals
- √ Extended slaughter or killing
- Ø Disposal of products

√ Monitoring or surveillance

Ø Other measures (*specify*): -

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

National Authorities:

a.) Central Agricultural Office

Animal Health and Animal Welfare Directorate

Division for Animal Health

address: H-1149 Budapest, Tábornok u. 2. "B" ép.

Tel: +36 1 460 6300 ext. 115

- determines the terms and territorial expansion of the monitoring programme;
- keeps contact with national institutes (e.g. public health, civil defence), with ministries of other countries and with EU Institutes;
- coordinates and supervises the implementation of the programmes carried out by the County Government Office Food Chain Safety and Animal Health Directorates (19)

Central Agricultural Office, Veterinary Diagnostic Directorate

(1 central and 2 regional laboratories)

The central laboratory in Budapest is the National Reference Laboratory for Bluetongue.

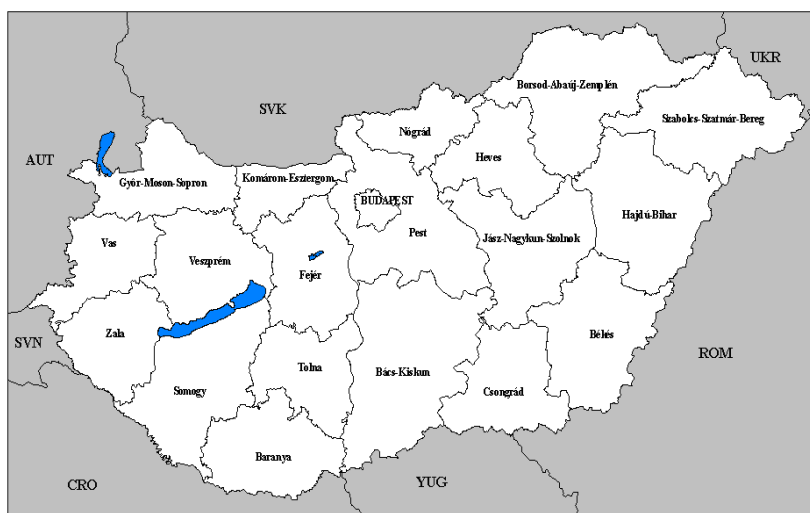
b) Ministry of Rural Development

address: H-1055 Budapest, Kossuth L. tér 11.

Department of Food Chain Control

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

The programme for eradication, control and monitoring is to be applied on the whole territory of Hungary. Map 1 shows the administrative map of Hungary.



Map 1: Hungary and its 19 counties

4.4. *Measures implemented under the programme*

4.4.1. *Notification of the disease:*

- Hungarian Act No XLVI. 2008 on Food Chain and its official control
- Decree No. 41/1997. (V. 28.) of the Ministry of Agriculture on issuing the Animal Health Code.
- Decree No 31/2009. of MARD laying down the protective measures against Bluetongue, issued on 27th March, 2009.

4.4.2. *Target animals and animal population:*

The programme for eradication, control and monitoring is to be applied on the whole territory of Hungary. Table 1 indicates the cattle and sheep number in Hungary (see on the next page).

County	Total number of animals	
	cattle	sheep
Baranya	29459	25799
Bács-Kiskun	66134	166992
Békés	60690	39847
Borsod-Abaúj-Zemplén	41962	50932
Csongrád	40137	38178
Fejér	43383	38037
Győr-Moson-Sopron	50639	6616
Hajdú-Bihar	92379	193753
Heves	14588	18101
Jász-Nagykun-Szolnok	53565	45800
Komárom-Esztergom	13512	7664
Nógrád	14605	17637
Pest	50156	52536
Somogy	32308	22364
Szabolcs-Szatmár-Bereg	40228	156955
Tolna	23365	33012
Vas	29134	2357
Veszprém	39763	42392
Zala	24074	10210
Total	760081	969182

Table 1: Number of cattle and sheep in Hungary on 31st of December, 2010

4.4.3. Identification of animals and registration of holdings:

System in place for the registration of holdings:

In case of cattle a computerized, centralized identification and registration system (ENAR) has been operated since 1997 and each bovine herd has been registered in the frame of this system.

In case of sheep a computerized, centralized identification and registration system (ENAR) has been operated since 2000. The ovine herds have been registered on the basis of the Decree No. 29/2000. (VI. 9.) of Minister of Agriculture and Rural Development (MARD).

In case of goats the Animal Health Code (Decree No 41/1997. (V.28.) of Minister of Agriculture) prescribes that during identification of these animals pre-printed ear-tags must be used, but until May of 2005 there was no special ministerial decree for the identification and registration of goats. However the voluntary registration of goats have been started by the breeding organizations of goats without the special legislation. In May of 2005 a new decree of MARD, Decree No 47/2005. (V.23.), was published about the identification and registration of goats and sheep and for the implementation of Council Regulation (EC) No 21/2004. (In case of sheep this new decree replaced the Decree No. 29/2000. (VI. 9.) of MARD.) In October of 2007 a new decree of the MARD, Decree No 119/2007. (X.18.) was published about centralized registration of holdings and herds.

System in place for the identification of animals:

Bovine animals are subject to individual identification and registration.

Registration and identification using central, computerised database:

From 18 Sept 1997 (Decree No. 62/1997. (IX. 10.) of MA):
ear-tagging by pre-printed, bar-coded individual number
data recording and handling in computerised, central database.

The rules of the Decree No. 62/1997. (IX. 10.) of MA were equivalent to the relevant rules of the EU. Since 1997 due to inter alia the changes of the EU rules we have modified our rules several times. The current legislative text, namely the Decree No 99/2002. (XI.5.) of MARD is fully compatible with the legislative Rules of the EU. (The Decree No 99/2002. (XI.5.) of MARD was modified before Accession by Decree No 12/2004. (I.31.) of MARD.)

Ovine and caprine animals are subject to individual identification and registration.

From July of 2005 the Decree No. 47/2005. (V.23.) of MARD about the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004 has been effective. Parallel making the new decree in the frame of a PHARE project a new central, computerised database for sheep and goats were developed. After 1 Jan 2006 this new central database was fully operable.

Registration and identification of caprine animals

From May of 2005: the Decree No 47/2005. (V.23.) of MARD were published about the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004. This is the first special Hungarian decree regarding the identification and registration of goats. On the basis of the new decree the new central, computerised database is fully operable for goats as well.

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

Not applicable.

4.4.5. Rules of the movement of animals:

Commission Regulation No 1266/2007/EC, Decree No 31/2009 of MARD laying down the protective measures against Bluetongue (issued on 27 March 2009) and the “Guide on measures concerning Bluetongue disease” – which was issued first on 22 September 2008 and kept up-to-date since then – regulate the strict transport rules to be used inland Hungary and in case of intracommunity trade.

4.4.6. Tests used and sampling schemes:

Serological surveillance of cattle:

Test used: Antibody ELISA

The sampling size must be calculated with 5% prevalence and 95% confidence due to the Annex I. point 2.2. of the Comm. Reg. No 1266/2007/EC. With this method the prescribed total number of samples is 1121 per year (59 sample/county). The serological examinations shall be carried out in October or in November as it is already indicated in point 3.3 of this document.

Entomological investigation:

Entomological investigation shall be carried out on the whole territory of Hungary with the following frequency: 1 sample/county/month

From each insect sample genus determination and virological testing is carried out.

4.4.7. Vaccines used and vaccination schemes:

Vaccination against bluetongue disease is prohibited on the whole territory of Hungary.

16th § of Decree No 31/2009. of MARD laying down the protective measures against Bluetongue states that to avoid an outbreak or the spread of the disease the chief veterinary officer can order the vaccination and identification of vaccinated animals or herds in the restricted zone (except the surveillance zone), but only with the recommendation of the National Disease Control Center and with notification of the European Commission.

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

The “Guide on measures concerning Bluetongue disease” – which was issued first on 22 September 2008 and kept up-to-date since then – contains measures to be done to enhance the bio-security level of the holdings located in the restricted zone. The main goals were to strictly regulate the transport conditions, strengthen the isolation rules and to protect the animals against vector species. All permitted biocid products available for animal protection against the vector species in Hungary are listed in annex of the guide.

4.4.9. Measures in case of a positive result:

In case of bluetongue positive result measures applied must comply with the Commission Regulation No 1266/2007 of 26 October 2007 on implementing rules for Council Directive 2000/75/EC as regards the control, monitoring, surveillance and restrictions on movements of certain animals of susceptible species in relation to bluetongue.

The seropositive animals are slaughtered by isolated slaughter.
The viropositive animals are killed and disposed.

17th § of Decree No 31/2009. of MARD laying down the protective measures against Bluetongue states the rules of disposal of the dead animals.

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

The 54th § and 55th § of the Hungarian Act No XLVI. 2008 on Food Chain and its official control determines the basic rules of state compensation of the animal owners.

The detailed rules of the state compensation are laid down in Decree No. 41/1997. (V. 28.) of the Ministry of Agriculture on issuing the Animal Health Code from 141st § to 155th §.

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

At the beginning of the year of implementation the director of the Animal Health and Animal Welfare Directorate of the Central Agricultural Office issues a circular letter for all directors of County Government Office Food Chain Safety and Animal Health Directorates on the detailed rules and terms of implementation of the monitoring programme and on the terms of the reports to be sent for the Animal Health and Animal Welfare Directorate of the Central Agricultural Office. The Animal Health and Animal Welfare Directorate is responsible for collecting all reports made on county level and for preparing and sending all reports for the Commission regarding the monitoring programme (including the mid term and final reports, too).

5. Benefits of the programme:

Benefits: The most important aim for Hungary is to maintain the bluetongue free status for the whole territory of the country and to detect the reintroduction of the disease as early as possible.

6. Data on the epidemiological evolution during the last five years¹:

6.1. Evolution of the disease:

6.1.1. *Data on evolution of the disease²*

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

Year: 2008

Situation on date: 29-04-2009

Disease^(b): bluetongue

Animal species: cattle

surveillance programme in the restricted zone

Region ^(c)	Total number of herds ^(d)	Total number of herds under the programme	Number of herds checked ^(e)	Number of positive herds ^(f)	Number of new positive herds ^(g)	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 = (7/5)x100	9 = (4/3)x100	10 = (5/4)x100	11 = (6/4)x100
Borsod-Abaúj-Zemplén county	1303			1	0	1	100			
Total				1	0	1	100			

¹ The data on the evolution of the disease are provided according to the tables below where appropriate.

² Data to provide for Bovine tuberculosis, Bovine brucellosis, IBR/IPV (AI + embryo units), Ovine and caprine brucellosis (B. melitensis), Enzootic bovine leukosis (EBL), Aujeszky's disease, Anthrax, Maedi/Visna and CAEV, IBR/IPV (other types of enterprise), Johnes disease (paratuberculosis), CBPP, African Swine fever, swine vesicular disease, endemic classical swine fever, heartwater transmitted by vector insects in the French overseas departments, babesiosis transmitted by vector insects in the French overseas departments, anaplasmosis transmitted by vector insects in the French overseas departments, Bluetongue in endemic or high risk areas.

6.1.1.2. *Data on animals (one table per year and per disease/species)*

Year: 2008

Situation on date: 31-12-2008

Disease^(a): bluetongue

Animal species: cattle

Region ^(b)	Total number of animals ^(c)	Number of animals ^(d) to be tested under the programme	Number of animals ^(d) tested	Number of animals tested individually ^(e)	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered ^(f)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9=(4/3)x100	10=(6/4)x100
Borsod-Abaúj-Zemplén county	41979				18	18	456		
Total									

- (a) Disease and animal species if necessary.
- (b) Region as defined in the approved eradication programme of the Member State.
- (c) Total number of animals existing in the region including eligible herds and non-eligible herds for the programme.
- (d) Includes animals tested individually or under bulk level scheme.
- (e) Include only animals tested individually, do not include animals tested by bulk level samples (e.g.: milk bulk tank tests).
- (f) Include all positive animal slaughtered and also the negative animals slaughtered under the programme.

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

Year: 2009

Situation on date: 31-12-2009

Disease^(a): bluetongue

Animal species: cattle

Region ^(b)	Total number of animals ^(c)	Number of animals ^(d) to be tested under the programme	Number of animals ^(d) tested	Number of animals tested individually ^(e)	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered ^(f)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9=(4/3)x100	10=(6/4)x100
Baranya	18040	1346	1346	1346	0	0	0	100	0
Bács-Kiskun	50943	2006	2014	2014	0	0	0	100,4	0
Békés	60000	791	791	791	0	0	0	100	0
Borsod-Abaúj-Zemplén	40832	544	543	543	0	0	0	99,82	0
Csongrád	33740	824	676	676	0	0	0	82,04	0
Győr-Moson-Sopron	50443	1344	545	545	0	0	0	40,55	0
Fejér	39237	1310	1310	1310	0	0	0	100	0
Hajdú-Bihar	76150	468	468	468	0	0	0	100	0
Heves	12440	272	269	269	0	0	0	98,9	0
Jász-Nagykun-Szolnok	44583	420	420	420	0	0	0	100	0
Komárom-Esztergom	13500	541	545	545	0	0	0	100,74	0
Nógrád	11553	188	267	267	0	0	0	142,02	0
Pest	45919	722	733	733	0	0	0	101,52	0
Somogy	37500	1794	1830	1830	0	0	0	102,01	0
Szabolcs-Szatmár-Bereg	34278	452	447	447	0	0	0	98,89	0
Tolna	23483	1107	1110	1110	0	0	0	100,27	0
Vas	26700	999	999	999	0	0	0	100	0
Veszprém	37144	1400	1400	1400	0	0	0	100	0
Zala	20374	1131	1131	1131	0	0	0	100	0
Total	676859	17659	16844	16844	0	0	0	95,38	0

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

Year: 2010

Situation on date: 31-12-2010

Disease^(a): bluetongue

Animal species: cattle (sentinel monitoring in the restricted zone)

Region ^(b)	Total number of animals ^(c) on 31-12-2010	Number of animals ^(d) to be tested under the programme	Number of animals ^(d) tested	Number of animals tested individually ^(e)	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered ^(f)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9=(4/3)x100	10=(6/4)x100
Borsod-Abaúj-Zemplén	41962	544*	564	564	0	0	0	103,98	0
Hajdú-Bihar	92379	468*	468	468	0	0	0	100	0
Heves	14588	272*	264	264	0	0	0	97,06	0
Jász-Nagykun-Szolnok	53565	420*	420	420	0	0	0	100	0
Bács-Kiskun	66134	152**	152	152	0	0	0	100	0
Csongrád	40137	148**	148	148	0	0	0	100	0
Győr-Moson-Sopron	50639	148**	148	148	0	0	0	100	0
Nógrád	14605	188**	192	192	0	0	0	102,13	0
Pest	50156	452**	452	452	0	0	0	100	0
Szabolcs-Szatmár-Bereg	40228	452**	452	452	0	0	0	100	0
Baranya	29459	59***	61	61	0	0	0	103,39	0
Békés	60690	59***	62	62	0	0	0	105,08	0
Fejér	43383	59***	149	149	0	0	0	252,54	0
Komárom-Esztergom	13512	59***	113	113	0	0	0	191,53	0
Somogy	32308	59***	60	60	0	0	0	101,69	0
Tolna	23365	59***	63	63	0	0	0	106,78	0
Vas	29134	59***	60	60	0	0	0	101,69	0
Veszprém	39763	59***	64	64	0	0	0	108,47	0
Zala	24074	59***	59	59	0	0	0	100	0
Total	760081	3775	3951	3951	0	0	0	104,66	0

Notes:

* : The restricted zone with sentinel monitoring was in force until 15 October 2010, but the size of the zone was reduced from 1 February 2010.

** : The restricted zone with sentinel monitoring was in force until 31 Jan. 2010. After that date these counties were considered as free from BT.

*** : These counties were free from BT in 2010, so no sentinel monitoring was applied.

6.1.2. *Data on evolution of the disease*³ **Not applicable**

Year:

Situation on date:

Animal species:

Disease/infection^(a):

Region	Type of flock ^(b)	Total number of flocks ^(c)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked ^(d)	Number of positive ^(e) flocks ^(a)			Number of flocks depopulated ^(a)		Total number of animals slaughtered or destroyed ^(a)		Quantity of eggs destroyed (number or kg) ^(a)		Quantity of eggs channelled to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Total																	

- (a) For zoonotic Salmonella indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specify as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.
- (b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, etc. Flocks equals herds or as appropriate
- (c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme
- (d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock should not be counted twice even if it has been checked more than once.
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample should be taken into account only once.

³ Data to provide for salmonellosis (zoonotic salmonella), *Salmonella pullorum*, *Salmonella gallinarum*, *Mycoplasma gallisepticum*, *Campylobacteriosis* and agents thereof.

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: 2009

Disease: bluetongue

Animal species/category: cattle

Description of the used serological tests: antibody-ELISA

Description of the used microbiological or virological tests: PCR (in case of seropositive animals and also for the detection of the virus in Culicoides samples)

Description of the other used tests: entomological test (identifying and counting the suspected vector species)

Region	Serological tests		Microbiological or virological tests		Other tests (entomology)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of tested (* : See NOTE)	Number of positive samples (** : See NOTE)
Baranya	1346	0				
Bács-Kiskun	2997	0	184	0		
Békés	2891	0				
Borsod-Abaúj-Zemplén	3822	0	79	0	35741	9275
Csongrád	1676	0				
Győr-Moson-Sopron	2222	0	51	0		
Fejér	1310	0				
Hajdú-Bihar	3744	0				
Heves	1929	0				
Jász-Nagykun-Szolnok	3280	0				
Komárom-Esztergom	844	0				
Nógrád	1308	0				
Pest	3897	0	1	0		
Somogy	1830	0				
Szabolcs-Szatmár-Bereg	3407	0	17	0		
Tolna	1110	0				
Vas	999	0				
Veszprém	1400	0				
Zala	1131	0				
Total	41143	0	332	0	35741	9275

NOTES:

* : In this column the numbers indicate the examined insects collected by the Culicoides traps.

** : In this column the numbers indicate the identified Culicoides species.

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

Year: 2010

Disease: bluetongue

Animal species/category: cattle

Description of the used serological tests: antibody-ELISA

Description of the used microbiological or virological tests: PCR (in case of seropositive animals and also for the detection of the virus in Culicoides samples)

Description of the other used tests: entomological test (identifying and counting the suspected vector species)

Region	Serological tests		Microbiological or virological tests		Other tests (entomology)	
	Number of samples tested	Number of positive samples	Number of samples tested (*: See NOTE)	Number of positive samples	Number of tested (** : See NOTE)	Number of positive samples (*** : See NOTE)
Baranya	61	0	5	0	242	85
Bács-Kiskun	282	0	4	0	55358	13874
Békés	62	0	6	0	1660	447
Borsod-Abaúj-Zemplén	1931	0	12	0	1641	577
Csongrád	243	0	6	0	12067	3019
Győr-Moson-Sopron	209	0	3	0	437	146
Fejér	149	0	3	0	575	170
Hajdú-Bihar	1558	0	14	0	27933	7063
Heves	1189	0	11	0	333	165
Jász-Nagykun-Szolnok	694	0	0	0	0	0
Komárom-Esztergom	113	0	7	0	4261	1083
Nógrád	192	0	5	0	6188	1550
Pest	675	0	6	0	543	150
Somogy	60	0	6	0	7405	1971
Szabolcs-Szatmár-Bereg	519	0	8	0	3757	970
Tolna	63	0	2	0	2605	655
Vas	60	0	5	0	8799	2206
Veszprém	39	0	4	0	1720	450
Zala	59	0	5	0	108	33
Total	8158	0	112	0	135632	35614

NOTES:

* : In this column the numbers indicate the virological tests carried out on pooled entomological samples.

** : In this column the numbers indicate the examined insects collected by the Culicoides traps.

*** : In this column the numbers indicate the identified Culicoides species.

6.3. Data on infection (one table per year and per disease/species)

Year: 2008

Disease: bluetongue

Animal species: cattle

Region	Number of herds infected	Number of animals infected
HUNGARY		
Borsod-Abaúj-Zemplén county	1	18
Total	1	18

Note: In Hungary there were no bluetongue cases before September 2008.

Year: 2009

Disease: bluetongue

Animal species: cattle

Region	Number of herds infected	Number of animals infected
HUNGARY	0	0
Total	0	0

Year: 2010

Disease: bluetongue

Animal species: cattle

Region	Number of herds infected	Number of animals infected
HUNGARY	0	0
Total	0	0

6.4. Data on the status of herds at the end of each year⁴: Not applicable

Year:

Disease^(a):

Animal species:

Region ^(b)	Status of herds and animals under the programme ^(c)													
	Total number of herds and animals under the programme		Unknown ^(d)		Not free or not officially free				Free or officially free suspended ^(g)		Free ^(h)		Officially free ⁽ⁱ⁾	
					Last check positive ^(e)		Last check negative ^(f)							
	Herds	Animals ^(j)	Herds	Animals ^(j)	Herds	Animals ^(j)	Herds	Animals ^(j)	Herds	Animals ^(j)	Herds	Animals ^(j)	Herds	Animals ^(j)
Total														

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State
- (c) At the end of the year
- (d) Unknown: No previous checking results available
- (e) Not free and last check positive: Herd checked with at least one positive result in the latest check
- (f) Not free and last check negative: Herd checked with negative results in the latest check but not being “free” or “officially free”
- (g) Suspended as defined in Community or national legislation for the respective disease at the end of the reporting period.
- (h) Free herd as defined in Community or national legislation for the respective disease.
- (i) Officially free herd as defined in Community or National legislation for the respective disease .
- (j) Include animals under the programme in the herds with the referred status (left column).

⁴ Data to provide for Bovine tuberculosis, Bovine brucellosis, IBR/IPV (AI + embryo units), Ovine and caprine brucellosis (B. melitensis), Enzootic bovine leukosis (EBL), Aujeszky's disease, Maedi/Visna and CAEV, IBR/IPV (other types of enterprise), Johnes disease (paratuberculosis).

6.5. Data on vaccination or treatment programmes⁵: Not applicable

Year: _____ **Disease^(a):** _____ **Animal species:** _____

Description of the used vaccination, therapeutic or other scheme:

There were no vaccinations against Bluetongue in Hungary.

Region ^(b)	Total number of herds ^(c)	Total number of animals	Information on vaccination or treatment programme					
			Number of herds ^(c) in vaccination or treatment programme	Number of herds ^(c) vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered	Number of adults ^(d) vaccinated	Number of young ^(d) animals vaccinated
Total								

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State
- (c) Herds equal flocks, or holdings as appropriate
- (d) Only for Bovine brucellosis, Ovine and caprine brucellosis (*B. melitensis*) and zoonotic salmonella, and as defined in the programme

⁵ Data to provide, where appropriate for Bovine brucellosis, IBR/IPV (AI + embryo units), Ovine and caprine brucellosis (*B. melitensis*), Aujeszky's disease, *Salmonella pullorum*, *Salmonella gallinarum*, Anthrax, IBR/IPV (other types of enterprise), Johnes disease (paratuberculosis), *Mycoplasma gallisepticum*, heartwater transmitted by vector insects in the French overseas departments, babesiosis transmitted by vector insects in the French overseas departments, anaplasmosis transmitted by vector insects in the French overseas departments, Bluetongue in endemic or high risk areas, Rabies, Echinococcosis and salmonellosis (zoonotic salmonella) and agents thereof.

6.6.3. *Data on vaccination or treatment of wildlife: Not applicable*

Year: _____ **Disease^(a):** _____ **Animal species:** _____

Description of the used vaccination, therapeutic or other scheme: see 3.2 and 3.3.

Region ^(b)	Square km	Vaccination or treatment programme		
		Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment administered
Total	-	-	-	

(a) Disease and species if necessary

(b) Region as defined in the approved eradication programme of the Member State

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

7.1.1.1. Number and specification of tests

Disease^(a): bluetongue

Animal species: ruminants

Region^(b)	Type of the test^(c)	Target population^(d)	Type of sample^(e)	Objective^(f)	Number of planned tests
HUNGARY					
	Serological examination - ELISA	Cattle	Blood	Surveillance	1121
	Entomological examination	Culicoides	insects	Monitoring	35000
	Virological examination	Culicoides	insects	Monitoring	228
	Virological examination - PCR	Cattle	Blood	Confirming of seropositive animals	100
	Virological examination - PCR	Small ruminants	Blood	Control of clinically suspicious animals	100
Total					36549

(a) Disease and species if necessary

(b) Region as defined in the approved eradication programme of the Member State

(c) Description of the test (e.g. SN-test, AB-Elisa, RBT, ...)

(d) Specification of the targeted species and the categories of targeted animals (e.g. sex, age, breeding animal, slaughter animal, ...).

(e) Description of the sample (e.g. blood, serum, milk, ...)

(f) Description of the objective (e.g. qualification, surveillance, confirmation of suspected cases, monitoring of campaigns, seroconversion, control on deleted vaccines, testing of vaccine, control of vaccination, ...)

7.1.1.2. *Testing schemes*⁷:

Laboratory testing of cattle:

According to Annex I. of Commission Regulation No 1266/2007/EC:

For monitoring outside the restricted zone: the sample size has been calculated such a way to be able to detect a prevalence of 5% with 95% confidence in the bovine population. Once a year, in September-October.

In Hungary all animals originating from an infected country must be isolated and tested for Bluetongue disease serologically. In case of seropositivity or vaccinated animals, virological testing shall be carried out. All costs of the laboratory testing related to animal transport are the duties of the owner.

Entomological investigation:

Entomological investigation shall be carried out on the whole territory of Hungary with the following frequency: 1 sample/county/month

From each insect sample genus determination and virological testing is carried out.

⁷ Describe the testing scheme according the different categories if appropriate (which herds and animals, the number of animals per herd, the frequency and the interval of sampling) with reference to the national and Community legislation where appropriate.

7.1.2. *Targets on testing herds and animals*⁸

7.1.2.1 *Targets on the testing of herds*^(a): **Not applicable**

Disease^(b):

Animal species:

Region ^(c)	Total number of herds ^(d)	Total number of herds under the programme	Number of herds expected to be checked ^(e)	Number of expected positive herds ^(f)	Number of expected new positive herds ^(g)	Number of herds expected to be depopulated	% positive herds expected to be depopulated	TARGET INDICATORS		
								Expected % herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence
1	2	3	4	5	6	7	8 = (7/5)x100	9 = (4/3)x100	10 = (5/4)x100	11 = (6/4)x100
Total										

- (a) Herds equal flocks, or holdings as appropriate.
- (b) Disease and animal species if necessary.
- (c) Region as defined in the approved eradication programme of the Member State.
- (d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.
- (e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining, upgrading, etc., the health status of the herd. In this column a herd should not be counted twice even if has been checked more than once.
- (f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.
- (g) Herds which status in the previous period was Unknown, Not free-negative, Free, Officially Free or suspended and have at least one positive animal in this period.

⁸ Data to provide for Bovine tuberculosis, Bovine brucellosis, IBR/IPV (AI + embryo units), Ovine and caprine brucellosis (B. melitensis), Enzootic bovine leukosis (EBL), Aujeszky's disease, Anthrax, Maedi/Visna and CAEV, IBR/IPV (other types of enterprise), Johnes disease (paratuberculosis), CBPP, African Swine fever, swine vesicular disease, endemic classical swine fever, heartwater transmitted by vector insects in the French overseas departments, babesiosis transmitted by vector insects in the French overseas departments, anaplasmosis transmitted by vector insects in the French overseas departments, Bluetongue in endemic or high risk areas.

7.1.2.2 Targets on the testing of animals:

Disease^(a): bluetongue

Animal species: cattle

Region ^(b) COUNTY	Total number of animals ^(c)	Number of animals ^(d) under the programme	Number of animals ^(d) expected to be tested	Number of animals to be tested individually ^(e)	Number of expected positive animals	Slaughtering		TARGET INDICATORS	
						Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered ^(f)	Expected % coverage at animal level	% positive animals (Expected animal prevalence)
1	2	3	4	5	6	7	8	9=(4/3)x100	10=(6/4)x100
Baranya	29459	59	59	59	0			100	
Bács-Kiskun	66134	59	59	59	0			100	
Békés	60690	59	59	59	0			100	
Borsod-Abaúj-Zemplén	41962	59	59	59	0			100	
Csongrád	40137	59	59	59	0			100	
Fejér	43383	59	59	59	0			100	
Győr-Moson-Sopron	50639	59	59	59	0			100	
Hajdú-Bihar	92379	59	59	59	0			100	
Heves	14588	59	59	59	0			100	
Jász-Nagykun-Szolnok	53565	59	59	59	0			100	
Komárom-Esztergom	13512	59	59	59	0			100	
Nógrád	14605	59	59	59	0			100	
Pest	50156	59	59	59	0			100	
Somogy	32308	59	59	59	0			100	
Szabolcs-Szatmár-Bereg	40228	59	59	59	0			100	
Tolna	23365	59	59	59	0			100	
Vas	29134	59	59	59	0			100	
Veszprém	39763	59	59	59	0			100	
Zala	24074	59	59	59	0			100	
Total	760081	1121	1121	1121	0			100	

7.1.3. *Targets on testing of flocks*⁹ : **Not applicable**

Year:

Situation on date:

Animal species:

Disease/infection^(a):

Region	Type of flock ^(b)	Total number of flocks ^(c)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Expected number of flocks to be checked ^(d)	Number of flocks ^(e) expected to be positive ^(a)			Number of flocks expected to be depopulated ^(a)		Total number of animals expected to be slaughtered or destroyed ^(a)		Expected quantity of eggs to be destroyed ^(a) (number or kg)		Expected quantity of eggs channelled to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Total																	

- (a) For zoonotic salmonella indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specify as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.
- (b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, etc. Flocks equals herds or as appropriate
- (c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme
- (d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock should not be counted twice even if it has been checked more than once.
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample should be taken into account only once.

⁹ Data to provide for salmonellosis (zoonotic salmonella), *Salmonella pullorum*, *Salmonella gallinarum*, *Mycoplasma gallisepticum*, *Campylobacteriosis* and agents thereof.

7.2. Targets on qualification of herds and animals¹⁰ : Not applicable

Disease^(a):

Animal species:

Region ^(b)	Total number of herds and animals under the programme		Targets on the status of herds and animals under the programme ^(c)											
			Expected unknown ^(d)		Expected not free or not officially free				Expected free or officially free suspended ^(g)		Expected free ^(h)		Expected officially free ⁽ⁱ⁾	
					Last check positive ^(e)		Last check negative ^(f)							
	Herds	Animals ^(j)	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total														

(a) Disease and species if necessary

(b) Region as defined in the approved eradication programme of the Member State

(c) At the end of the year

(d) Unknown: No previous checking results available

(e) Not free and last check positive: Herd checked with at least one positive result in the latest check

(f) Not free and last check negative: Herd checked with negative results in the latest check but not being “free” or “officially free”

(g) Suspended as defined for the respective disease in Community or national legislation where appropriate or according national legislation.

(h) Free herd as defined for the respective disease where appropriate in Community or national legislation where appropriate or according national legislation

(i) Officially free herd as defined for the respective disease where appropriate in Community or national legislation where appropriate or according national legislation

(j) Include animals under the programme in the herds with the referred status (left column)

¹⁰ Data to provide for Bovine tuberculosis, Bovine brucellosis, IBR/IPV (AI + embryo units), Ovine and caprine brucellosis (B. melitensis), Enzootic bovine leukosis (EBL), Aujeszky's disease, Maedi/Visna and CAEV, IBR/IPV (other types of enterprise), Johnes disease (paratuberculosis).

7.3. Targets on vaccination or treatment:

7.3.1. *Targets on vaccination or treatment*¹¹ : Hungary is planning emergency vaccination only!

*Vaccine(s) and vaccination scheme or treatment and treatment scheme*¹²: If the epidemiological situation requires, Hungary is planning to implement vaccination of the ruminants in the protection zone with 100 km radius around the outbreak.

In October 2010 Hungary regained the bluetongue free status for the whole territory of the country, therefore no preliminary calculations can be prepared for emergency vaccination at this stage.

Disease^(a): bluetongue

Animal species: cattle

Region ^(b)	Total number of herds ^(c) in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Targets on vaccination or treatment programme					
			Number of herds ^(c) in vaccination or treatment programme	Number of herds ^(c) expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered	Number of adults ^(d) expected to be vaccinated	Number of young ^(d) animals expected to be vaccinated
Total								

¹¹ Data to provide for Bovine brucellosis, IBR/IPV (AI + embryo units), Ovine and caprine brucellosis (*B. melitensis*), Aujeszky's disease, *Salmonella pullorum*, *Salmonella gallinarum*, Anthrax, IBR/IPV (other types of enterprise), Johnes disease (paratuberculosis), *Mycoplasma gallisepticum*, heartwater transmitted by vector insects in the French overseas departments, babesiosis transmitted by vector insects in the French overseas departments, anaplasmosis transmitted by vector insects in the French overseas departments, Bluetongue in endemic or high risk areas, Rabies, Echinococcosis, salmonellosis (zoonotic salmonella) and agents thereof.

¹² Specify the vaccine and the vaccination scheme (which herds and animals, the frequency and the interval of vaccination) with reference to the national legislation.

7.3.2. *Targets on vaccination or treatment¹³ of wildlife: Not applicable*

Disease^(a):

Animal species:

Region ^(b)	Square km	Targets on the vaccination or treatment programme		
		Number of doses of vaccine or treatments expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine or treatment expected to be administered
Total				

(a) Disease and species if necessary

(b) Region as defined in the approved eradication programme of the Member State

¹³ Data to provide for Bovine brucellosis, Ovine and caprine brucellosis (*B. melitensis*), Aujeszky's disease, , African Swine fever, swine vesicular disease, endemic classical swine fever, Rabies, Echinococcosis and trichinellosis and agents thereof.

8. **Detailed analysis of the cost of the programme**¹⁴ Estimated costs for the year 2012 (1 €= 265,72 HUF by ECB on 31 March 2011)

<i>Costs related to</i>	<i>Specification</i>	<i>Number of units</i>	<i>Unitary cost in €</i>	<i>Total amount in €</i>	<i>Community funding requested (yes/no)</i>
1. Testing					
1.1. Cost of the analysis	<i>Test: ELISA</i>	1121 [piece]	3,91	4 383,11	yes
	<i>Test: PCR</i>	200 [piece]	32,52	6 504,00	yes
	<i>Test: Culicoides specification</i>	35000 [piece]	1,35	47 250,00	yes
	<i>Test: Culicoides virology</i>	228 [piece]	32,52	7 414,56	yes
1.2. Cost of sampling	<i>Sampling</i>	1549 [piece]	0,5	774,50	yes
1.3. Other costs					
2. Vaccination or treatment <i>(in case of unfavourable epidemiological situation)</i>					
2.1. Purchase of vaccine/ treatment	<i>Cost of the vaccine</i>				
	<i>Application of the vaccine</i>				
2.2. Distribution costs					
2.3. Administering costs					

¹⁴ Fixed costs should not be included. All amounts are VAT excluded.

2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals					
3.2. Transport costs					
3.3. Destruction costs					
3.4. Loss in case of slaughtering					
3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)					
4. Cleaning and disinfection	Cleaning, disinfection, protective clothes				
	disinsectisation				
5. Salaries (staff contracted for the programme only)					
6. Consumables and specific equipment					
7. Other costs					
TOTAL				66 326,17	yes

Abbreviations:

MA = Ministry of Agriculture (until 1997)

MARD = Ministry of Agriculture and Rural Development (from 1998 to May 2010)

MRD = Ministry of Rural Development (since June 2010)

AHC = Animal Health Code

Bp. = Budapest, capital of Hungary