



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit G5 - Veterinary Programmes

**SANCO/10890/2012**

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

## **Survey programme for Rabies**

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

**Latvia**

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

## ANNEX II

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

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

Member State: LATVIA

Disease(s)<sup>1</sup>: RABIES

Year of implementation: **2011-2013**

Reference of this document: ERADICATION PROGRAMME OF RABIES CO-FINANCED BY THE COMMUNITY

Contact (name, phone, fax, e-mail): Martins Serzants, phone +371 67027586, fax +371 67322727, martins.serzants@pvd.gov.lv

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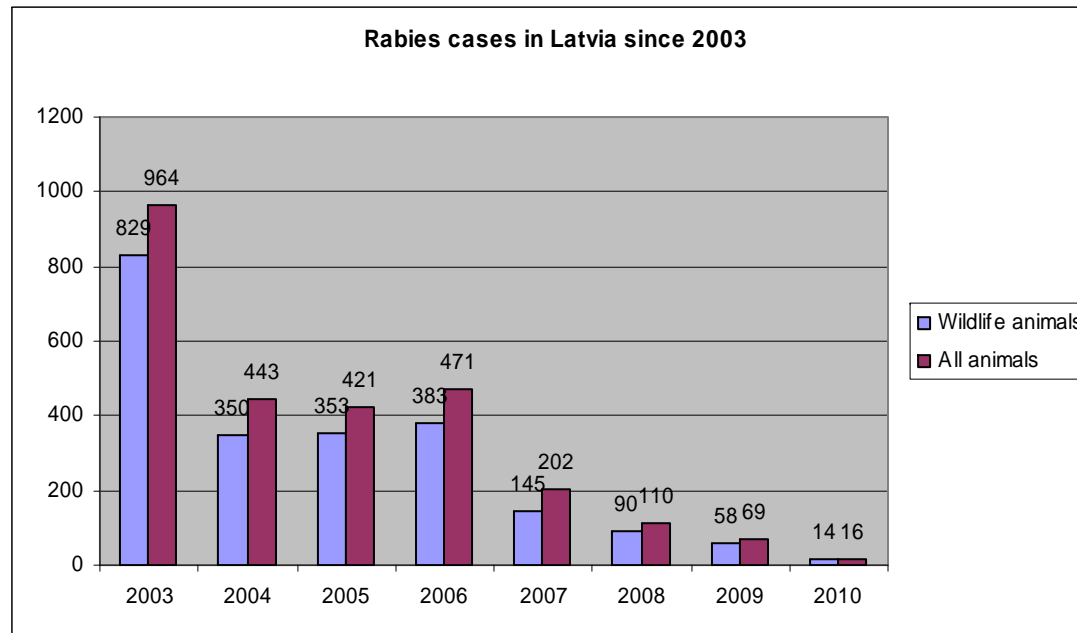
#### **2. Historical data on the epidemiological evolution of the disease(s)<sup>2</sup>:**

Canine rabies was registered in Latvia until 1960, the situation changed in early sixties when most of cases were registered in wild animals - foxes and racoon dogs. The outbreaks of rabies are recorded in all 26 administrative regions. One human case was reported in 2003. To reduce the prevalence of rabies and eliminate the sources of infection in the nature (wild animals) Food and Veterinary Service has started the oral vaccination of foxes since 1991. But because of deficiency of budget resources it was not possible to carry out regular vaccination (each year and in all territory of Latvia) and purchase necessary amount of vaccine. Since 2000 the vaccination was carried out in 17 districts, but since 2001 in all 26 administrative districts, but amount of vaccine baits was insufficient. Vaccination was carried out in autumn and spring by distributing vaccine baits twice with 14 days interval. There was no vaccination in 2004 due to delayed start of PHARE project. In 2005 oral vaccination campaigns were carried out in half of territory – 28 000 km<sup>2</sup> twice a year, providing 23 baits per 1 km<sup>2</sup>. Starting from 2006 two vaccination campaigns was organized in all territory of Latvia when 23 – 25 baits per km<sup>2</sup> were distributed.

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<sup>1</sup> One document per disease is used unless all measures of the programme on the target population are used for the monitoring, the control and eradication of different diseases.

<sup>2</sup> 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.



### 3. Description of the submitted programme<sup>3</sup>:

The submitted programme is prepared with the purpose to distribute vaccine baits in whole territory of Latvia (64 635 km<sup>2</sup>) twice per year (spring and autumn) to immunize the main reservoirs of rabies in our country – foxes and raccoon dogs. **This is a multi-annual program for period 2011 – 2013.**

Total amount of vaccine baits to be used in each year is **3 200 000** for all the territory, distributing in two campaigns. **Totally 9 600 000 baits will be distributed within three year period (2011 to 2013). Vaccine baits will be distributed by airplanes with distance between flight lines 500 - 600 meters.**

For the purpose to control efficiency of vaccination programme covers investigation of 4 animals (foxes, raccoon dogs) per 100 km<sup>2</sup> for antibody titre (using Biorad ELISA test), bait uptake (Detection of tetracycline in mandible tissue using luminescent microscopy).

<sup>3</sup> 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.

#### 4. Measures of the submitted programme

##### 4.1. *Summary of measures under the programme*

Duration of the programme:

First year: **2011**

Last year: **2013**

Control

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

Eradication

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

Monitoring or surveillance

Other measures (*specify*):

##### 4.2. *Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme<sup>4</sup>:*

The **Food and Veterinary Service (FVS) of the Republic of Latvia** is a state administrative institution headed by the CVO and supervised by the Ministry of Agriculture.

The FVS consists of the central body placed in Riga and territorial structural units (the local level) – 10 regional offices and one city (Riga) office. The central body coordinates activities of the local level and ensure a unified implementation of legislation. The local level carries out the official surveillance in accordance with the state surveillance programmes.

The central authority of Food and Veterinary Service elaborates and coordinates the measures of rabies prophylaxis, control and eradication in the Republic of Latvia, registers and analyses rabies epizootic situation, participates at international animal infectious disease reporting systems. FVS also cooperates with specialists from self-governments, the State Forestry Service, Infectology Center of Latvia and other institutions in order to carry out disease control.

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<sup>4</sup> 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.

**State Senior Veterinary inspectors and State Veterinary inspectors** are responsible on surveillance of epizootic situation concerning zoonoses in the territory, organize, coordinate and control execution of demands determined in state; coordinate involvement of state authorized veterinarians in system of state surveillance of zoonoses.

**State Authorized Veterinarians** carry out several tasks of prophylaxis and eradication of zoonoses determined in legislation and in regulation documentation of FVS. They are involved in Rabies passive surveillance.

*4.3. Description and delimitation of the geographical and administrative areas in which the programme is to be implemented<sup>5</sup>:*

**Program will be implemented in all administrative regions. Total area of republic of Latvia: 64635 km<sup>2</sup>.**

Latvia lies on the Eastern coast of the Baltic Sea. The combined length of the national borders is 1862 km. The length of land borders with Estonia - 343 km, the Eastern with Russia - 282 km, the Southeast with Byelorussia – 167 km and the Southern with Lithuania - 576 km. The length of sea border is 494 km.

Taking into account above described situation when rabies has been registered in the whole territory of Latvia, the number of main infection carriers - wild animals - foxes and racoon dogs is impermissible high and there is no geographical barrier that could limit the distribution of infection, with an exception of the Baltic Sea in the West and the Gulf of Riga in the North.

*4.4. Measures implemented under the programme<sup>6</sup>*

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

*4.4.2. Measures and terms of legislation as regards the identification of animals<sup>7</sup>:*

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

- Law of Veterinary Medicine (26.04.2001)

- Regulation of Cabinet of Ministers No 178, 23 February, 2010 “Order of rabies eradication and control”

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<sup>5</sup> 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.

<sup>6</sup> Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.

<sup>7</sup> Not applicable for poultry.

- Order No 241, 21.09.2001 issued by Food and Veterinary Service determines the list of diseases (including TSEs) immediately notified to the Central Authority of Food and Veterinary Service (replaced by FVS order No.6, 08.01.2009.)

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

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 concerned<sup>8</sup>:*

4.4.7. ***Measures and terms of legislation as regards the control (testing, vaccination, ...) of the disease:***

- On the basis of Law on Veterinary Medicine, FVS prepare annual animal infectious disease surveillance plan, including Rabies determining monitoring tests and amount of vaccine to be distributed in wildlife area.

*All measures are carried out on basis of following documents:*

- Regulation of Cabinet of Ministers No 178, 23 February, 2010 “Order of rabies eradication and control”

- Food and Veterinary Service Instruction Order No 215, 3 September, 2001) “On prophylaxis and eradication of Rabies”

Both documents regulate Rabies control measures when rabies is suspected or confirmed (replaced by Rabies eradication and surveillance programme, approved by CVO order No.49, (16.04.2010).

Regarding oral vaccination of wildlife, there is Animal Infectious Disease State Surveillance Program, approved annually by CVO, where Chapter on oral vaccination is included. Program defines area to be vaccinated, number of vaccine baits and campaigns per year, as well as efficiency evaluation of vaccination campaigns.

**Oral vaccination programme in Belorussia territory (buffer zone – 5700 km<sup>2</sup>) is also included in this programme.**

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<sup>8</sup> 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.

### **General description of the costs and benefits<sup>9</sup>:**

Total costs of the programme for Latvia per year are **2 518 249, 40** Euro. The general purpose of the programme is to eradicate Rabies in wild population (foxes and racoon dogs) by oral vaccination in the whole territory of Latvia (64 635 km<sup>2</sup>) twice a year. Vaccine baits will be distributed from airplanes with distance between flight lines 500.

Total amount of vaccine baits to be used in 2012 is **3 200 000** distributed in two campaigns (spring and autumn). The same strategy will be applied in 2013. Next year current program will be re-evaluated and updated according to rabies epidemiological situation in Latvia and neighbouring countries.

Total costs of the programme for Belorussia for 2012 are **135 375, 00** Euro. The general purpose of the programme is to eradicate Rabies in wild population (foxes and racoon dogs) by oral vaccination in the buffer zone Braslaw, Myory, Vyerhnyadzvinsk regions in Belorussia (5700 km<sup>2</sup>) twice a year. Vaccine baits will be distributed from airplanes with distance between flight lines 1000 meters.

Total amount of vaccine baits to be used in 2012 is **285 000** distributed in two campaigns (spring and autumn).

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<sup>9</sup> A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.

**6. Stratified data on surveillance and laboratory tests**

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

Description of the used virological tests: Fluorescent antibody test, OIE Manual,2004, chapter 2.2.5.B.1.c),i), p.331;

Mouse inoculation test; OIE Manual,2004, chapter 2.2.5.B.1.c),i), p.331.

..... Virus isolation in cell cultures

**2002**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
horses			6	4		
cows			51	22		
dogs			194	31		
cats			161	32		
fur animals			2	-		
wild animals			774	411		
others			9	-		
<b>Total</b>			<b>1197</b>	<b>500</b>		



2003

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
horses			3	-		
cows			58	20		
dogs			302	63		
cats			243	52		
foxes			725	474		
raccoon dogs			412	284		
badger			54	32		
ferrets			40	10		
marten			42	14		
beaver			18	5		
roe			16	5		
fur animals			5	1		
wild animals			22	3		
others			5	1		
<b>Total</b>			<b>1945</b>	<b>964</b>		

**2004**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
horses			2	-		
cows			52	25		
dogs			174	33		
cats			198	35		
foxes			409	181		
raccoon dogs			231	143		
badger			16	10		
ferrets			12	3		
marten			29	3		
beaver			5	1		
roe			36	8		
fur animals			5	-		
wild animals			13	-		
others			24	1		
<b>Total</b>			<b>1206</b>	<b>443</b>		

2005

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
horses			2	1		
cows			42	17		
dogs			157	20		
cats			170	29		
foxes			402	176		
raccoon dogs			222	137		
badger			21	13		
ferrets			16	5		
marten			24	9		
beaver			11	2		
roe			38	7		
other wild animals			28	4		
others			7	1		
<b>Total</b>			<b>1140</b>	<b>421</b>		

- (a) Disease and animal species if necessary.
- (b) Breeders, laying hens, etc, when appropriate
- (c) Region as defined in the approved eradication programme of the Member State.
- (d) Number of samples tested, all confounded.
- (e) Number of positive samples, all confounded

**2006**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
cows			-	13		
dogs			-	31		
cats			-	44		
foxes			-	187		
raccoon dogs			-	153		
other wild animals			-	43		
<b>Total</b>			<b>1045</b>	<b>471</b>		

- (a) Disease and animal species if necessary.
- (b) Breeders, laying hens, etc, when appropriate
- (c) Region as defined in the approved eradication programme of the Member State.
- (d) Number of samples tested, all confounded.
- (e) Number of positive samples, all confounded

**2007**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
horses			2	0		
cows			16	5		
dogs			133	25		
cats			192	27		
foxes			305	95		
raccoon dogs			134	33		
badger			15	3		
ferrets			26	5		
marten			30	4		
mink			12	1		
roe			39	1		
other wild animals			28	3		
Domestic animals			3	0		
<b>Total</b>			<b>935</b>	<b>202</b>		

- (a) Disease and animal species if necessary.
- (b) Breeders, laying hens, etc, when appropriate
- (c) Region as defined in the approved eradication programme of the Member State.
- (d) Number of samples tested, all confounded.
- (e) Number of positive samples, all confounded

**2008**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
cows			28	6		
dogs			122	8		
cats			151	6		
foxes			390	44		
raccoon dogs			156	41		
badger			14	1		
wolf			2	1		
marten			14	1		
beaver			6	1		
otter			3	1		
<b>Total</b>			<b>980</b>	<b>110</b>		

- (a) Disease and animal species if necessary.
- (b) Breeders, laying hens, etc, when appropriate
- (c) Region as defined in the approved eradication programme of the Member State.
- (d) Number of samples tested, all confounded.
- (e) Number of positive samples, all confounded

**2009**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
dogs			73	7		
cats			88	4		
foxes			302	24		
raccoon dogs			138	24		
badger			11	8		
polecat			11	1		
roe deer			26	1		
<b>Total</b>			<b>716</b>	<b>69</b>		

**2010**

Animal species <sup>(c)</sup>	Serological tests		Virological tests		Other tests	
	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>	Number of samples tested <sup>(d)</sup>	Number of positive samples <sup>(e)</sup>
dogs			52	2		
foxes			1361	11		
raccoon dogs			746	1		
badger			8	1		
deer			2	1		
<b>Total</b>			<b>2169</b>	<b>16</b>		

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

**Year: 1999-2010**

**Disease<sup>(a)</sup>: Rabies**

**Animal species: Domestic and wildlife animals**

Latvia	Number of herds infected <sup>(c)</sup>	Number of animals infected
1999	-	169
2000	-	516
2001	-	477
2002	-	500
2003	-	964
2004	-	443
2005	-	421
2006	-	471
2007	-	202
2008	-	110
2009	-	69
<b>2011</b>	-	<b>16</b>

(a) Disease and animal species if necessary.

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

(c) Herds equal flocks, or holdings as appropriate.



Rabies cases in Braslaw, Myory and Vyerhnyadzvinsk regions in Belorussia (2006 – 2010).

Animal species	Number of infected animals				
	2006	2007	2008	2009	2010
cows	8	3	1	1	0
dogs	14	2	4	9	3
cats	5	1	2	4	2
horses	2	0	0	0	1
other	1	0	0	0	1
foxes	11	12	3	4	2
raccoon dogs	14	1	1	4	4
marten	3	1	0	1	0
elk	0	1	0	1	0
<b>Total</b>	<b>58</b>	<b>21</b>	<b>11</b>	<b>24</b>	<b>13</b>

**6.3. Data on wildlife<sup>10</sup>**

*6.3.1. Estimation of wildlife population*

*Data on wildlife population is obtained from State Forest Service.*

**Year: 1999-2009**

**Method of estimation<sup>(a)</sup>:**

Latvia	Estimation of the population of the concerned wild species			
	Species: Foxes	Species: Raccoon dogs	Species: Wolves	Species: Bobcats
1999	26177	11740	572	671
2000	27649	12657	544	648
2001	29083	14022	473	667
2002	30044	15096	566	750
2003	28713	15901	673	765
2004	30893	17258	603	824
2005	32294	19384	588	1006
2006	33064	20156	550	863
2007	32173	21870	665	980
2008	34864	24568	816	1326
<b>2009</b>	<b>34039</b>	<b>26934</b>	<b>917</b>	<b>1553</b>

Latvia	Estimation of the population of the concerned wild species			
	Species: Badgers	Species: Martens	Species: Minks	Species: Otters
1999	8062	18566	15353	6746
2000	8291	20470	16486	7035
2001	8852	21880	17979	7766
2002	9364	22902	19065	8194
2003	9795	No data	18388	7733

<sup>10</sup> 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.

2004	10771	22532	20440	8784
2005	10586	21614	22655	8899
2006	10518	21975	23100	8585
2007	10699	21547	22469	9197
2008	11483	22685	23042	-
<b>2009</b>	<b>12381</b>	<b>23565</b>	<b>23847</b>	<b>-</b>

Latvia	Estimation of the population of the concerned wild species			
	Species: Beavers	Species: Polecats	Species: Roes	Species: Elks
1999	42614	6591	55551	10595
2000	45706	7487	68183	11873
2001	51934	8932	79622	13229
2002	54684	9941	95098	14218
2003	62138	9600	110759	13793
2004	66886	11066	129576	14494
2005	73502	12284	150120	14498
2006	77474	11660	195841	14488
2007	82277	12145	225851	14409
2008	89474	11798	240204	15004
<b>2009</b>	<b>86915</b>	<b>11687</b>	<b>186340</b>	<b>16430</b>

- (a) The hunting bag is considered to be the standard method of estimation. If other method is used, explain  
(b) Region as defined in the approved eradication programme of the Member State

6.3.2. *Monitoring of wildlife (one table per year and per disease/species)*

**Year: 2001-2010**

**Disease<sup>(a)</sup>: Rabies**

**Animal species: Foxes and racoon dogs**

**Description of the other used tests:**

In 2005 tests for detection of antibody level: <sup>1</sup>FAVN and ELISA<sup>2</sup> (samples considered positive if antibody level  $\geq$  0,5 IU/ml). In 2006 only ELISA test was used to detect antibody level (seroconversion).

<sup>3</sup>Detection of tetracycline in mandible tissue using luminescent microscopy (samples collected from animals hunted in vaccinated territory).

<sup>4</sup>Fluorescent antibody tests (samples collected from animals hunted in vaccinated territory).

Regarding vaccination efficiency control after campaigns in 2010 – samples were collected in from 28 June till 31 July and during period from 18 October till 10 December.

Latvia	Microbiological or virological tests <sup>4</sup>		Serological tests		Other tests <sup>3</sup>	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
2001	-	-	-	-	285	151
2002	-	-	-	-	319	175
2003	-	-	-	-	501	209
2004	-	-	-	-	257	98
2005	-	-	509 <sup>1</sup> / 1219 <sup>2</sup>	216 <sup>1</sup> / 176 <sup>2</sup>	1678	901
2006	737	11	731	341	736	620
2007	4579	28	4621	2176	4628	3392

2008	3273	9	3291	1648	3303	2449
2009	825	3	3140	1587	3143	2265
<b>2010</b>	<b>2274</b>	<b>0</b>	<b>1940</b>	<b>1410</b>	<b>1949</b>	<b>1686</b>

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State

6.3.3. *Data on vaccination or treatment of wildlife*

**Year: 1999-2010**

**Disease<sup>(a)</sup>: Rabies**

**Animal species: foxes and racoon dogs**

**Description of the used vaccination scheme:** Rabies oral vaccine baits were distributed manually near the fox's caverns till 2003. In 2005 and 2006 baits were distributed using airplanes and helicopters. Distance between flights lines was 1 km. Vaccines were distributed during two campaigns (spring and autumn). In 2009 autumn campaign for territories in 27 150 km<sup>2</sup> and in 2010 autumn campaign for territories in 32000 km<sup>2</sup> lines between flights were reduced to 500 meters.

Latvia	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
1998 (Vaccination was not carried out in all territory of Latvia)	*	56100	2	56100
1999 (Vaccination was not carried out in all territory of Latvia)	*	60000	2	60000
2000 (Vaccination was not carried out in all territory of Latvia)	*	89000	2	89000
2001	*	310000	2	310000
2002	*	300000	2	300000
2003	*	300000	2	300000
2004	0	0	0	0
2005	28000	1247200	2	1247200
2006	64000	3372000	2	3372000
2007	64000	3 351 600	2	3 351 600
2008	49326	919 200	1	919 200
2009	64000	2 980 800	2	2 980 800
<b>2010</b>	<b>64000</b>	<b>3 200 000</b>	<b>2</b>	<b>3 200 000</b>

Total			
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- (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<sup>(a)</sup>: RABIES

Animal species: Foxes and raccoon dogs

#### Period 2012

<i>Region<sup>(b)</sup></i>	<i>Type of the test<sup>(c)</sup></i>	<i>Target population<sup>(d)</sup></i>	<i>Type of sample<sup>(e)</sup></i>	<i>Objective<sup>(f)</sup></i>	<i>Number of planned tests</i>
Latvia	Biorad Enzyme-linked immunosorbent assay (ELISA)	Foxes and raccoon dogs	Serum	Efficiency of vaccination campaign	2560
	Detection of tetracycline in mandible tissue using luminescent microscopy	Foxes and raccoon dogs	Mandible	Efficiency of vaccination campaign	2560
	Fluorescent antibody test (FAT)	Foxes and raccoon dogs	Brain tissue	Virus detection	3000
<b>Total</b>					8120

#### Period 2013

<i>Region<sup>(b)</sup></i>	<i>Type of the test<sup>(c)</sup></i>	<i>Target population<sup>(d)</sup></i>	<i>Type of sample<sup>(e)</sup></i>	<i>Objective<sup>(f)</sup></i>	<i>Number of planned tests</i>
Latvia	Biorad Enzyme-linked immunosorbent assay (ELISA)	Foxes and raccoon dogs	Serum	Efficiency of vaccination campaign	2560
	Detection of tetracycline in mandible tissue using luminescent microscopy	Foxes and raccoon dogs	Mandible	Efficiency of vaccination campaign	2560
	Fluorescent antibody test (FAT)	Foxes and raccoon dogs	Brain tissue	Virus detection	3000
<b>Total</b>					8120



- (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 scheme(s)<sup>11</sup>:**

According to Order, issued by Chief Veterinary Officer, determining number of samples and area where to collect animals for investigation.

Efficiency of vaccination campaigns is evaluated in all regions where vaccines are distributed and 4 animals per 100 km<sup>2</sup> should be submitted to laboratory for testing. Samples are collected in collaboration with hunters and FVS territorial units are responsible for receiving and sending of samples to the laboratory.

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<sup>11</sup> 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.

## 7.2. Targets on vaccination or treatment<sup>12</sup> of wildlife

Disease<sup>(a)</sup>: Rabies

Animal species: Foxes and racoon dogs

It is planned to distribute vaccine baits evenly in all country for the period 2012 - 2013, Distance between flights for next two years will be 500 meters.

### Period 2012

Region <sup>(b)</sup>	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
Latvia	64635 km <sup>2</sup>	1 600 000	2	3 200 000
<b>Total</b>	<b>64635 km<sup>2</sup></b>	<b>1 600 000</b>	<b>2</b>	<b>3 200 000</b>

It is planned to distribute vaccine baits in Braslaw, Myory, Vyerhnyadzvinsk regions in Belorussia for territories 5700 km<sup>2</sup>. Distance between flights will be 1000 meters.

### Period 2012

Region <sup>(b)</sup>	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
Belorussia	5700 km <sup>2</sup>	142 500	2	285 000
<b>Total</b>	<b>5700 km<sup>2</sup></b>	<b>142 500</b>	<b>2</b>	<b>285 000</b>

<sup>12</sup> 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.

**Period 2013**

Region <sup>(b)</sup>	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
Latvia	64635 km <sup>2</sup>	1 600 000	2	3 200 000
<b>Total</b>	<b>64635 km<sup>2</sup></b>	<b>1 600 000</b>	<b>2</b>	<b>3 200 000</b>

(a) Disease and species if necessary

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

## 7. Detailed analysis of the cost of the programme for Latvia<sup>13</sup> Period 2012.

<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>
<b>1. Testing</b>					
<b>1.1. Cost of the analysis</b>	<i>Test:</i> BIORAD ELISA	2560	16,82	43 059,2	Yes
	<i>Test:</i> Detection of tetracycline in mandible	2560	12,12	31 027,2	Yes
	<i>Test:</i> Fluorescent antibody test (FAT)	3000	16,12	48 360	Yes
	<i>Test:</i> Titration of vaccine baits	18	143,5	2583	Yes
<b>1.2. Cost of sampling</b>	Sampling	3000	7,1	21 300	Yes
<b>1.3. Other costs</b>	Hunting and delivery costs (foxes and raccoon dogs)	2560	10,00	25 600	Yes
<b>2. Vaccination or treatment</b>					
<b>2.1. Purchase of vaccine/treatment</b>	Vaccine baits	3 200 000	0,50	1 600 000	Yes
	Parenteral vaccine	2000	1,51	3020	
<b>2.2. Distribution costs</b>	Vaccine aerial distribution	128 000 km <sup>2</sup>	5,7	739 600	Yes
<b>2.3. Administering costs</b>	Administration of parenteral vaccination	2000	1,85	3 700	Yes
<b>2.4. Control costs</b>					

<sup>13</sup> Fixed costs should not be included. All amounts are VAT excluded.

<b>3. Slaughter and destruction</b>					
<b>3.1. Compensation of animals</b>					
<b>3.2. Transport costs</b>					
<b>3.3. Destruction costs</b>					
<b>3.4. Loss in case of slaughtering</b>					
<b>3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)</b>					
<b>4. Cleaning and disinfection</b>					
<b>5. Salaries (staff contracted for the programme only)</b>					
<b>6. Consumables and specific equipment</b>					
<b>7. Other costs</b>					
<b>TOTAL</b>				<b>2 518 249,40</b>	

**Detailed analysis of the cost of the programme for Belorussia Period 2012.**

<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>
<b>1. Testing</b>					
1.1. Cost of the analysis					
1.2. Cost of sampling					
1.3. Other costs					
<b>2. Vaccination or treatment</b>					
2.1. Purchase of vaccine/treatment	Vaccine baits	285 000	0,60	171 000	Yes
2.2. Distribution costs	Vaccine aerial distribution	11 400 km <sup>2</sup>	8,75	99 750,00	Yes
2.3. Administering costs					
2.4. Control costs					
<b>3. Slaughter and destruction</b>					
3.1. Compensation of animals					
3.2. Transport costs					
3.3. Destruction costs					

<b>3.4. Loss in case of slaughtering</b>					
<b>3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)</b>					
<b>4. Cleaning and disinfection</b>					
<b>5. Salaries (staff contracted for the programme only)</b>					
<b>6. Consumables and specific equipment</b>					
<b>7. Other costs</b>					
<b>TOTAL</b>				135375,00	

Period 2013. Latvia

<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>
<b>1. Testing</b>					
<b>1.1. Cost of the analysis</b>	<i>Test:</i> BIORAD ELISA	2560	16,82	43 059,2	Yes
	<i>Test:</i> Detection of tetracycline in mandible	2560	12,12	31 027,2	Yes
	<i>Test:</i> Fluorescent antibody test (FAT)	3000	16,12	48 360	Yes
	<i>Test:</i> Titration of vaccine baits	18	143,5	2583	Yes
<b>1.2. Cost of sampling</b>	Sampling	3000	7,1	21 300	Yes
<b>1.3. Other costs</b>	Hunting and delivery costs (foxes and raccoon dogs)	2560	10,00	25 600	Yes
<b>2. Vaccination or treatment</b>					
<b>2.1. Purchase of vaccine/treatment</b>	Vaccine baits	3 200 000	0,50	1 600 000	Yes
	Parenteral vaccine	2000	1,51	3020	
<b>2.2. Distribution costs</b>	Vaccine aerial distribution	128 000 km <sup>2</sup>	5,7	739 600	Yes
<b>2.3. Administering costs</b>	Administration of parenteral vaccination	2000	1,85	3 700	Yes
<b>2.4. Control costs</b>					
<b>3. Slaughter and destruction</b>					
<b>3.1. Compensation of animals</b>					
<b>3.2. Transport costs</b>					



<b>3.3. Destruction costs</b>					
<b>3.4. Loss in case of slaughtering</b>					
<b>3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)</b>					
<b>4. Cleaning and disinfection</b>					
<b>5. Salaries (staff contracted for the programme only)</b>					
<b>6. Consumables and specific equipment</b>					
<b>7. Other costs</b>					
<b>TOTAL</b>				<b>2 518 249,40</b>	

