



EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL
Unit 04 - Veterinary Control Programmes

SANCO/13001/2010

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

Eradication programme of Rabies

Approved* for 2011 by Commission Decision 2010/712/EU

Finland

* in accordance with Council Decision 2009/470/EC

Submission Date	Submission Number
23/04/2010	1272018774505-126

1. Identification of the programme			
Member State	Disease	Species	Request of Community co-financing from beginning of
Finland	Rabies	Foxes and other wild carnivores	2011
			To end of 2013

1.1 Contact			
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2. Historical data on the epidemiological evolution of the disease

Rabies was common in the Finnish dog population at the beginning of the 20th century, but the disease was eradicated from the country by vaccinating local dog populations during the 1950's. In April 1988, a local spot of essentially sylvatic rabies was discovered in south-eastern Finland. From April 1988 to February 1989 a total number of 66 virologically verified cases were recorded within a geographical area of 1 700 km² (48 raccoon dogs, 12 foxes, 2 badgers, 2 domestic cats, one dog and one dairy bull). All virus isolates were identical and closely related with the strain occurring in Estonia. As a first measure the local dog population in the area, some 8 000 animals, were vaccinated against rabies at the expense of the state. At the same time it

2. Historical data on the epidemiological evolution of the disease

was also highly recommended to vaccinate all other dogs. In co-operation with the WHO surveillance centre in Tübingen, Germany, a field campaign of oral vaccination of raccoon dogs and foxes was started in September 1988. During four distribution operations, the last one in the autumn 1990, a total of 200 000 Tübingen baits were distributed over a total area of 12 725 km². In the first year the bait distribution was mainly done by local volunteer hunters, but also aerial distribution was used. Since the first year only aerial distribution has been used. Since February 1989, no rabies cases have been found in wild carnivores in Finland. However, rabies was found in an imported horse in 2003. In an imported dog in 2007 and in one Daubenton's bat in 2009 (EBLV-2). In accordance with the WHO standards, Finland was declared rabies free in March 1991. The infection pressure in wild carnivore species in Russia is, however, high and it poses a continuous risk for the reintroduction of the disease.

Since 1991, 80 000 vaccine baits have been distributed every autumn over a 20 - 25 km wide and 250 km long zone along the south eastern border against Russia. Since 2004, distribution has been carried out twice a year, in spring and in autumn. Since 2003, rabies vaccine baits have also been distributed on the adjacent area on the Russian territory once per year.

3. Description of the submitted programme

This programme submitted for 2011-2013 has the same content as the Finnish rabies programme in 2008-2010. As in the previous years, rabies vaccine baits will be distributed over a buffer zone along the south eastern border against Russia. The objective is to maintain an adequate immunity in the wild raccoon dog and fox population in order to prevent rabies epidemics in Finland. Because of the unfavourable progress in rabies situation in Russia it is necessary to continue vaccination campaigns also in Russia, adjacent to the buffer zone in Finland. The extension of the vaccination area to the Russian territory was also recommended by the Food and Veterinary Office during a mission carried out in 1999.

The rabies bait vaccines will be distributed on the Finnish territory twice a year, in spring and autumn. On the adjacent area on the Russian territory a realistic objective is to vaccinate only once a year so that the efforts in Russia could be targeted to the areas with higher infection pressure, i.e. along the borders of Estonia and Latvia.

Continuous surveillance and monitoring for rabies is carried out by Evira in Finland. The efficacy of rabies oral vaccination campaigns are evaluated by measuring the antibody response after vaccination and also tetracycline marker in wild animals. Small carnivores, which are sent to the Evira from the vaccination area in Finland, are tested for rabies antibodies and tetracycline marker in addition to the virus detection test.

In 2003-2009 the Russian partner has taken care of the distribution and sampling costs. Negotiations concerning details of the programme in 2011-2013 will be carried out with the relevant Russian authorities in summer 2010. The outcome of the negotiations and the signed agreement will be communicated to the Commission in the first half of September 2010.

4. Measures of the submitted programme

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4. Measures of the submitted programme
4.1 Summary of measures under the programme

Duration of the programme
beginning 2011 to end of 2013

First Year :	
Control	X
Testing	X
Slaughter and animals tested positive	
Killing of animals tested positive	X
Vaccination	X
Treatment	
Disposal of products	
Eradication, control or monitoring	

Last Year :	
Eradication	
Testing	X
Slaughter of positive animals	
Killing of animals tested positive	

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Extended slaughter of killing	
Disposal of products	
Other	X

4.2 Organisation, supervision and role of all stakeholders involved in the programme

The competent authority in charge of the programme is the Ministry of Agriculture and Forestry, Department of Food and Health. Vaccination, monitoring and surveillance in Finland will be carried out by the Finnish Food Safety Authority (Evira). Locally the control/monitoring of rabies is carried out by provincial veterinary officers and municipal veterinary officers. Furthermore, all other veterinarians are responsible for notifying immediately official veterinarians when they suspect rabies.

In Russia the partners are the regional veterinary authorities in the Republic of Karelia and Leningrad region, central authorities in the Federal Service for Veterinary and Phytosanitary Surveillance in Moscow (Roselkhoznadzor) and Federal Centre for Animal Health (FGI ARRIAH) in Vladimir. Responsibilities will be clarified in the agreement which is drafted during summer 2010.

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

The vaccination zone in Finland and Russia is the same as in the present programme: 20 to 25 km wide and 250 km long area along the border facing Russia, between the Gulf of Finland (Baltic Sea) and Tohmajärvi municipality, covering about 4 000 km² land area (i.e. excluding lakes and rivers), and a respective area in Russian side of the border (see the map in Annex 1).

4.4 Description of the measures of the programme

4.4.1 Notification of the disease

According to the Finnish legislation rabies has been notifiable and controlled since 1922 (Act 338/22, 29.12.1922). The last major changes into the legislation were made in 1999 (Decision No 9/EEO/1999, 12.5.1999). A new decree that will replace this decision is under preparation in 2010. Rabies has been and is also today classified as a dangerous animal disease according to Decision No 1346/1995, 28 November 1995.

Wild animals that are found dead in the nature are sent to Evira for examination free of charge. The tests carried out include an examination for rabies. Every year since the rabies free status was achieved, 60 - 600 domestic animals and animals found dead in the nature/roadkills or hunted are investigated for rabies. Monitoring of rabies in pet animals is based on detection of clinical signs and laboratory analyses. When a municipal veterinary officer is notified of a

4.4 Description of the measures of the programme

4.4.1 Notification of the disease

suspected rabid animal, he or she must investigate the animal. If the possibility of rabies cannot be excluded, the animal is either isolated for two weeks or killed and sent to Evira for laboratory analysis. If a municipal veterinary officer is not available when rabies is suspected, any other veterinarian is responsible for carrying out the necessary investigations and precautions.

Dogs that have crossed the Russian border must be investigated by the municipal veterinary officer for possible bite wounds. Also the background of the dog must be tried to find out: that is whether the dog is from Finland or from Russia, who owns the dog and has the dog been vaccinated. If a Finnish vaccinated dog has been bitten the dog must be kept under supervision of the owner for 45 days. After this period the municipal veterinary officer must investigate the dog for symptoms of rabies. If the dog has not been vaccinated or it has been vaccinated over two years ago the municipal veterinary officer must recommend that the dog should be euthanized. Otherwise the dog must be kept in quarantine for six months.

If no wounds are detected in a Russian dog (crossed border by it's own) the dog must be kept in quarantine for two weeks to find out the owner. If the owner is found the dog must be sent to him or her. Otherwise the dog must be euthanized and the head sent to Evira. If a Russian dog has been bitten it must be taken to quarantine. If the dog has not been vaccinated the municipal veterinary officer must recommend that the dog should be euthanized. Otherwise the dog must be sent immediately back to Russia. If the owner can not be found in three days the dog must be euthanized and the head sent to Evira.

4.4.2 Target animals and animal population

Small wildlife carnivores, e.g. fox, raccoon dog, badger, pine marten

4.4.3 Identification of animals and registration of holdings

NA

4.4.4 Qualifications of animals and herds

NA

4.4.5 Rules of the movement of animals

NA

4.4.6 Tests used and sampling schemes

In the previous programme at least 100 animals have been tested from the Finnish side of the vaccination area, and about 500 from the whole country. Target is to increase the number of sampled animals from the vaccination area to 200 in 2013 (i.e. at least 4 animals per 100 km).

On the Russian side the number of tested animals from the vaccination area has been lower, although situation has been better in recent years. Numbers of test animals will be laid down in the agreement drafted in summer 2010.

Tests used:

- for serological tests: RFFIT-test
- for microbiological or virological tests: Antigen-test (FAT), cultivation (MNA cells)
- a description of the other used tests: DNA/RNA -test (RT-PCR)
- for bait marker (tetracycline): fluorescence microscopy of mandible and tooth sections

4.4.7 Vaccines used and vaccination schemes

Fuchsoral baits: manufactured by Impfstoffwerk-Dessau, with SAD B19 vaccine at concentration of 106 TCID₅₀/ml have been used in Finland until 2009. However, Rabigen SAG2 won the call for tenders for 2010 - 2011 (concentration minimum 8log₁₀ CCID). Each vaccine batch is tested in the Finnish Food Safety Authority (Evira) for virus titre after receiving the vaccines and before the vaccines are distributed.

In Russia a bait vaccine "Sinrab" has been used in 2003-2009. Sinrab vaccine is manufactured by Federal Centre for Animal Health (FGI ARRIAH), Vladimir, Russia. Sinrab is a viral vaccine for oral immunization of wild carnivores against rabies produced from RV-97 strain. The vaccine is certified in Russia. Each vaccine bait contains one dose of RV-97 virus strain, at least 106.8 MLD₅₀. Master strain is Bel NIEV-VGNKI (RB-71) produced from "Ovechi" strain, VGNKI, by passaging in ovine brain (80 passages) and adaptation to primary rabbit kidney cell culture. The master strain was adapted to BHK-21 cell culture and RV-97 strain was produced. The vaccine used in the 2011-2013 programme will be negotiated with the Russian partner/partners during summer 2010.

The rabies bait vaccines will be distributed on the Finnish territory twice a year, in spring and autumn. On the adjacent area on the Russian territory a realistic objective is to vaccinate only once a year so that the efforts in Russia could be targeted to the areas with higher infection pressure, i.e. along the borders of Estonia and Latvia.

The baits will be distributed by an aircraft in Finland at a density of 20/km². The distance between flight lines is 1 000 m. Flight speed is 100-180 km/h and

4.4.7 Vaccines used and vaccination schemes
 fight altitude 80-100 m. Baits are dropped one bait per one second. In Russia the baits have been distributed by local hunters. However, aerial distribution is the target for 2011-2013.

4.4.8 Information and assessment on bio-security measures management and infrastructure
 NA

4.4.9 Measures in case of a positive result
 NA

4.4.10 Compensation scheme for owners of slaughtered and killed animals
 NA

4.4.11 Control on the implementation of the programme and reporting
 Implementation of the programme is controlled by information exchange, e.g. via e-mails and meetings with Evira and the Russian partner, as well as written annual reports from the Russian partners.

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5. Benefits of the programme

The aim is to maintain rabies free status by preventing sylvatic rabies entering Finland from Russia.

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

6.1 Evolution of the disease

6.1.1 Data on herds for year:

Year	Region	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	Indicators			
									% positive herds period prevalence	% new positive herds incidence	%	
Sum:												
Total:												

6.1.2 Data on animals for year:

Year	Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals prevalence
Total:										

6.2 Stratified data on surveillance and laboratory tests					
6.2.1 Stratified data on surveillance and laboratory tests for year :					
Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2009	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	4	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	29	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	139	1
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	181	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	198	0
	Finland	serological test	REFIT	15	0
	Finland	serological test	REFIT-test	67	13
	Finland	serological test	REFIT-test	135	29
	South eastern Finland	other test	Tetracycline mandible and tooth	4	1
2008	South eastern Finland	other test	Tetracycline mandible and tooth	48	18
	South eastern Finland	other test	Tetracycline mandible and tooth	104	24
			Sum	924	86
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	5	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	46	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	80	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	270	0

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6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples	
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	437	0	
	Finland	serological test	RFFIT-test	15	0	
	Finland	serological test	RFFIT-test	180	17	
	Finland	serological test	RFFIT-test	189	50	
2008	South eastern Finland	other test	Tetracycline mandible and tooth	216	44	
	South eastern Finland	other test	Tetracycline mandible and tooth	259	33	
			Sum:	1,697	144	
2007	Finland	serological test	RFFIT	14	2	
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	4	0	
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	23	0	
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	42	0	
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	222	0	
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	261	0	
	Finland	serological test	RFFIT-test	52	17	
	Finland	serological test	RFFIT-test	185	60	
	South eastern Finland	other test	Tetracycline mandible and tooth	21	8	
	South eastern Finland	other test	Tetracycline mandible and tooth	142	30	
				Sum:	966	117

6.2 Stratified data on surveillance and laboratory tests					
6.2.1 Stratified data on surveillance and laboratory tests for year :					
Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2006	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	3	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	17	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	79	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	225	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	230	0
	Finland	serological test	RFFIT-test	23	6
	Finland	serological test	RFFIT-test	93	33
	Finland	serological test	RFFIT-test	177	55
				Sum	847
2005	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	216	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	4	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	32	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	58	0
	Finland	microbiological or virological test	antigen test (FAT), cultivation (MNA)	200	0
	Finland, vaccination area	serological test	RFFIT	92	42
				Sum	602
			Total:	5,036	483

6.3 Data on infection for year :

Year	Region	Number of herds infected	Number of animal infected
2009	Finland	0	1
	Sum:	0	1
2008	Finland	0	0
	Sum:	0	0
2007	Finland	0	0
	Sum:	0	0
2006	Finland	0	0
	Sum:	0	0
2005	Finland	0	0
	Sum:	0	0
Total:		0	1

6.4 Data on the status of herds at the end of year

		Not Free or not officially free from disease									
		Last check positive		Last check negative		Free or officially free from disease status suspended		Free from disease		Officially free from disease	
Year	NUTS Region	Total number of herds and animals under the programme		Unknown		Animals		Animals		Animals	
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Total:											

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6.6 Data on wildlife				
6.6.1 Estimation of wildlife population for year :				
Year	Region	Species	Method of estimation	Estimation of the population
2008	Vaccination area, 4000 km2	raccoon dog	Game bags, radio-tracking, snow-track counts (Kauhala 2007)	3,200
			Sum:	5,800
2007	Vaccination area, 4000 km2	badger	Game bags, radio-tracking, snow-track counts (Kauhala 2007)	1,000
			Game bags, radio-tracking, snow-track counts (Kauhala 2007)	1,600
	Vaccination area, 4000 km2	raccoon dog	Game bags, radio-tracking, snow-track counts (Kauhala 2007)	3,200
			Sum:	5,600
2006	South eastern Finland	fox	Game bags, snow-track counts (wildlife triangles)	1,600
			Game bags, snow-track counts (wildlife triangles)	3,000
			Sum:	4,600
2005	South eastern Finland	fox	Game bags, snow-track counts (wildlife triangles)	1,600
			Game bags, snow-track counts (wildlife triangles)	3,000
			Sum:	4,600
			Total:	26,600

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6.6.2 Monitor of wildlife for year:

Year	Region	Species	Test Type	Test Description	Number of samples tested	Number of positive samples
2,005	See also point 6.2.1.	all species	other test	all tests	0	0
2,006	See also point 6.2.1.	all species	other test	all tests	0	0
2,006	Vaccination area, Finland	fox	serological test	RFFIT	18	9
2,006	Vaccination area, Finland	other wild animals	serological test	RFFIT	2	0
2,006	Vaccination area, Finland	raccoon dog	serological test	RFFIT	40	21
2,007	See also point 6.2.1.	all species	other test	all tests	0	0
2,007	Vaccination area, Finland	fox	serological test	RFFIT	21	10
2,007	Vaccination area, Finland	other wild animals	serological test	RFFIT	5	0
2,007	Vaccination area, Finland	raccoon dog	serological test	RFFIT	86	32
2,008	See also point 6.2.1.	all species	other test	all tests	0	0
2,008	Vaccination area, Finland	fox	serological test	RFFIT	49	15
2,008	Vaccination area, Finland	other wild animals	serological test	RFFIT	4	0
2,008	Vaccination area, Finland	raccoon dog	serological test	RFFIT	76	36
2,009	See also point 6.2.1.	All species	other test	all tests	0	0
2,009	Vaccination area, Finland	fox	serological test	RFFIT	32	9
2,009	Vaccination area, Finland	Other wild animals	serological test	RFFIT	2	0
2,009	Vaccination area, Finland	raccoon dog	serological test	RFFIT	63	17

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6.6.3 Data on vaccination or treatment of wildlife for year:						
Year	Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment to be administered	
2,005.00	Russian side of the border	4,000.00	60,000.00	1.00	60,000.00	
	South eastern Finland	4,000.00	80,000.00	2.00	160,000.00	
2,006.00	Russian side of the border	4,000.00	74,074.00	1.00	74,074.00	
	South eastern Finland	4,000.00	80,000.00	2.00	160,000.00	
2,007.00	Russian side of the border	4,000.00	75,758.00	1.00	75,758.00	
	South eastern Finland	4,000.00	80,000.00	2.00	160,000.00	
2,008.00	Russian side of the border	4,000.00	80,000.00	1.00	0.00	
	South eastern Finland	4,000.00	80,000.00	2.00	160,000.00	
2,009.00	Russian side of the border	4,000.00	84,000.00	2.00	167,963.00	
	South eastern Finland	4,000.00	60,000.00	2.00	160,000.00	
	Total:		773,832.00	16.00	1,177,795.00	

7. Targets

7.1 Targets related to testing (one table for each year of implementation)

7.1.1 Targets on diagnostic tests for year:

Year	Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
2011	Finland vaccination area	bait marker (tetracycline)	wild carnivores	mandible and tooth	control of bait uptake	150
	Finland vaccination area	serology (RFFIT)	wild carnivores	serum	control of vaccination	150
	Finland vaccination area	virology (FAT)	wild carnivores	brain	surveillance	150
	Finland whole country	serology (RFFIT)	wild carnivores	serum	control of vaccination	300
	Finland whole country	virology (FAT)	all animals	brain	surveillance	500
	Vaccination area in Russia	bait marker (tetracycline)	wild carnivores	mandible and tooth	control of bait uptake	50
	Vaccination area in Russia	serology (RFFIT)	wild carnivores	serum	control of vaccination	80
	Vaccination area in Russia	virology (FAT)	wild carnivores	brain	surveillance	80
	2012	Finland vaccination area	bait marker (tetracycline)	wild carnivores	mandible and tooth	control of bait uptake
Finland vaccination area		serology (RFFIT)	wild carnivores	serum	control of vaccination	180
Finland vaccination area		virology (FAT)	wild carnivores	brain	surveillance	180
Finland whole country		serology (RFFIT)	wild carnivores	serum	control of vaccination	300
Finland whole country		virology (FAT)	all animals	brain	surveillance	500
Vaccination area in Russia		bait marker (tetracycline)	wild carnivores	mandible and tooth	control of bait uptake	80
Vaccination area in Russia		serology (RFFIT)	wild carnivores	serum	control of vaccination	100
Vaccination area in Russia		virology (FAT)	wild carnivores	brain	surveillance	100

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7. Targets

7.1 Targets related to testing (one table for each year of implementation)

7.1.1 Targets on diagnostic tests for year:

Year	Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
2012	Finland vaccination area	bait marker (tetracycline)	wild carnivores	mandible and tooth	control of bait uptake	200
	Finland vaccination area	serology (RFFIT)	wild carnivores	serum	control of vaccination	200
	Finland vaccination area	virology (FAT)	wild carnivores	brain	surveillance	200
	Finland whole country	serology (RFFIT)	wild carnivores	serum	control of vaccination	300
	Finland whole country	virology (FAT)	all animals	brain	surveillance	500
	Vaccination area in Russia	bait marker (tetracycline)	wild carnivores	mandible and tooth	control of bait uptake	100
2013	Vaccination area in Russia	serology (RFFIT)	wild carnivores	serum	control of vaccination	100
	Vaccination area in Russia	virology (FAT)	wild carnivores	brain	surveillance	100
	Total:					

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on the testing of herds for year :

Year	Region	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	Target indicators							
							% positive herds expected to be depopulated	% positive herds expected to be depopulated	Expected % herd coverage	% new positive herds Expected herd incidence				

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on the testing of herds for year :

Year	Region	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	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
	Sum:										
	Total:										

7.1.2.2 Targets on the testing of animals for year:

Year	Region	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Slaughtering			Target indicators	
								Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)		
	Sum:											
	Total:											

7.2 Targets on qualification of herds and animals for year :

Targets on the status of herds and animals under the programme			
Total number of herds and animals under the programme	Expected unknown	Expected not free or not free from disease	Expected free or officially free from disease status suspended

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7.2 Targets on qualification of herds and animals for year :

Targets on the status of herds and animals under the programme															
Expected not free or not free from disease															
Year	Region	Total number of herds and animals under the programme		Expected unknown		Last check positive		Last check negative		Expected free or officially free from disease status suspended		Expected free from disease		Expected officially free from disease	
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
	Sum:														
	Total:														

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment for year :

Targets on vaccination or treatment programme															
Year	NUTS Region	Total number of herds in vaccination or treatment programme		Number of herds in vaccination or treatment programme		Number of herds 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 expected to be vaccinated		Number of young animals expected to be vaccinated	
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
	Sum:														
	Total:														

7.3.2 Targets on vaccination or treatment of wildlife for year

Targets on vaccination or treatment programme															

7.3.2 Targets on vaccination or treatment of wildlife for year

Targets on vaccination or treatment programme						
Year	NUTS Region	Square km	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	
2013	Russian side of the border	4,000	80,000	1	80,000	
	South eastern border of Finland	4,000	80,000	2	160,000	
	Sum:		160,000	3	240,000	
2012	Russian side of the border	4,000	80,000	1	80,000	
	South eastern border of Finland	4,000	80,000	2	160,000	
	Sum:		160,000	3	240,000	
2011	Russian side of the border	4,000	80,000	1	80,000	
	South eastern border of Finland	4,000	80,000	2	160,000	
	Sum:		160,000	3	240,000	
Total:			480,000	9	720,000	

8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2011	1. Testing	PCR	Cost of analysis	20	20	400.00	yes
		Serology (RFFIT)	Cost of analysis	300	12	3,600.00	yes
		Tetracycline	Cost of sampling	150	10	1,500.00	yes
		Virology (FAT)	Cost of analysis	500	12	6,000.00	yes
1. Testing				Sum:	970	11,500.00	
2011	2. Vaccination or treatment	Distribution in Finland	Distribution costs	2	16490	32,980.00	yes

Program for Eradication : PDF detail

1. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2011	2. Vaccination or treatment	Distribution in Russia	Distribution costs	1	16000	16,000.00	yes
		Vaccines in Finland	Purchase of vaccine/treatment of animal products	160,000	79	126,400.00	yes
		Vaccines in Russia	Purchase of vaccine/treatment of animal products	180,000	7	56,000.00	yes
	2. Vaccination or treatment			Sum:		240,003	231,380.00
	3. Slaughter and destruction	NA	NA	0	0		no
	3. Slaughter and destruction			Sum:	0	0.00	
	4. Cleaning and disinfection	NA	NA	0	0		no
	4. Cleaning and disinfection			Sum:	0	0.00	
	5. Salaries (staff contracted for the programme only)	NA	NA	0	0		no
	5. Salaries (staff contracted for the programme only)			Sum:	0	0.00	
6. Consumables and specific equipment	NA	NA	0	0		no	
6. Consumables and specific equipment			Sum:	0	0.00		
2011.00			Sum:	240,973	Sum:	242,880.00	
2012	1. Testing	PCR	Cost of analysis	20	20	400.00	yes
		Serology (RFFIT)	Cost of analysis	350	12	4,200.00	yes
		Tetracycline	Cost of sampling	180	10	1,800.00	yes
		Virology (FAT)	Cost of analysis	500	12	6,000.00	yes
	1. Testing			Sum:	1,050	12,400.00	
	2. Vaccination or treatment	Distribution in Finland	Distribution costs	2	17000	34,000.00	yes
		Distribution in Russia	Distribution costs	1	17000	17,000.00	yes
		Vaccination in Finland	Purchase of vaccine/treatment of animal products	160,000	8	128,000.00	yes
		2. Vaccination or treatment			Sum:	8	128,000.00

8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2,012	2. Vaccination or treatment	Vaccination in Russia	Purchase of vaccine/treatment of animal products	80,000	.75	60,000.00	yes
	2. Vaccination or treatment		Sum:	240,003		239,000.00	
	3. Slaughter and destruction	NA	NA	0	0		no
	3. Slaughter and destruction		Sum:	0		0.00	
	4. Cleaning and disinfection	NA	NA	0	0		no
	4. Cleaning and disinfection		Sum:	0		0.00	
	5. Salaries (staff contracted for the programme only)	NA	NA	0	0		no
	5. Salaries (staff contracted for the programme only)		Sum:	0		0.00	
	6. Consumables and specific equipment	NA	NA	0	0		no
	6. Consumables and specific equipment		Sum:	0		0.00	
2,012,00			Sum:	241,053	Sum:	251,400.00	

2,013	1. Testing	PCR	Cost of analysis	20	20	400.00	yes
		Serology (RFFIT)	Cost of analysis	400	12	4,800.00	yes
		Tetracycline	Cost of sampling	200	10	2,000.00	yes
		Virology (FAT)	Cost of analysis	500	12	6,000.00	yes
		1. Testing	Sum:	1,120		13,200.00	
2,013	2. Vaccination or treatment	Finland	Distribution costs	2	17000	34,000.00	yes
		Finland	Purchase of vaccine/treatment of animal products	160,000	.8	128,000.00	yes
		Russia	Purchase of vaccine/treatment of animal products	80,000	.75	60,000.00	yes
		Russian side of the border	Distribution costs	1	17000	17,000.00	yes
		2. Vaccination or treatment	Sum:	240,003		239,000.00	
3. Slaughter and destruction	NA	NA	0	0		no	

Program for Eradication : PDF detail

8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2013	3. Slaughter and disinfection	INA	Sum:	0	0	0.00	no
	4. Cleaning and disinfection	INA	Sum:	0	0	0.00	no
	5. Salaries (staff contracted for the programme only)	NA	Sum:	0	0	0.00	no
	6. Consumables and specific equipment	NA	Sum:	0	0	0.00	no
	Sum:			241,123	Sum:	252,200.00	
	Sum:			723,149	Sum:	746,480.00	
	Total:						

Program for Eradication : PDF detail

Program for Eradication : ANNEX 1

Submission Date	Submission Number
27/04/2010	1272851248990-220

1. Identification of the programme			
Member State	Disease	Species	Request of Community co-financing from beginning of
Finland	Bluetongue in endemic or high risk areas	Bovines	2011
			To end of
			2011

1.1 Contact			
Contact Name	Contact Phone	Contact Fax	Contact Email
Katri Levonen	+358916053437	+358916053338	katri.levonen@mmm.fi

2. Historical data on the epidemiological evolution of the disease

2. Historical data on the epidemiological evolution of the disease

Bluetongue has never been detected in Finland. However, the disease has been detected in the neighbouring country Sweden, and a fairly northern country Norway, thus possessing a danger that the disease might spread into Finland.

3. Description of the submitted programme

The aim of the program is to detect bluetongue as soon as possible in case the disease would enter into Finland.

Enforced surveillance is applied to the coastal areas in the south and south-west (Area A). If bluetongue would spread into Finland by airborne route the first places to be affected would most probably be the coastal areas towards Sweden and probably towards Estonia and Russia. In the two latter country, however, no virus circulation of BTV has been reported. In Sweden the bluetongue cases which have been detected have been situated in the southern part of the country.

In the enforced surveillance program bulk milk samples from every dairy herd are analysed 3 times a year: in August, September and November. Blood samples from beef cattle from Area A are analysed.

The rest of Finland except the most Northern areas Pohjois-Pohjanmaa, Kainuu and Lappi are taken into the basic surveillance program (Area B).

Imported cattle and other animals susceptible to bluetongue are random sampled. These samples are tested by PCR.

All other samples but imported animals are tested serologically by ELISA. In case of positive serology, samples for detecting the BT virus (by PCR) are taken. In case of positive PCR the animal is concerned BT positive.

Vaccination plan covers the coastal area where BT is most probable to enter the country. Vaccination will only take place after there has been bluetongue cases in Finland.

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Program for Eradication : PDF detail

Duration of the programme	
beginning of 2011 to end of 2011	

First Year :	
Control	
Testing	X
Slaughter and animals tested positive	
Killing of animals tested positive	X
Vaccination	X
Treatment	
Disposal of products	
Eradication, control or monitoring	

Last Year :	
Eradication	
Testing	X
Slaughter of positive animals	
Killing of animals tested positive	
Extended slaughter of killing	
Disposal of products	
Other	

4.2 Organisation, supervision and role of all stakeholders involved in the programme

Ministry of Agriculture and Forestry, Finnish Food Safety Authority Evira. In case of positive samples Regional State Administrative Agencies and local official veterinarians.

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

Enforced surveillance (Area A) coastal area in the south: Ahvenanmaa, Varsinais-Suomi, Uusimaa and parts of Satakunta, Häme, Kymenlaakso, Kaakkois-Suomi.

Basic surveillance (Area B), the rest of Finland except the most northern part of the country: Pohjanmaa, Etelä-Pohjanmaa, Keski-Suomi, Pirkanmaa, Pohjois-Savo, Etelä-Savo, Pohjois-Karjala and parts of Pohjois-Pohjanmaa, Satakunta, Häme, Kaakkois-Suomi.
Vaccination area is the same as area of enforced surveillance, Area A.

4.4 Description of the measures of the programme

4.4.1 Notification of the disease

The disease is notified according to ADNS; Council Directive 82/894/EEC as last amended by Commission Decision 2008/650/EC. Commission decision 2005/176/EC.

4.4.2 Target animals and animal population

Dairy cattle, beef cattle, sheep, goats. Imported animals susceptible to BT.

4.4.3 Identification of animals and registration of holdings

The identifications can be obtained from cattle register and sheep and goat register (Evira).

4.4.4 Qualifications of animals and herds

All dairy herds and all beef cattle herds in the Area A are included. In the area B 10% of dairy herds chosen by random sampling. Sheep and goat farms, which send blood samples to other eradication programs are sampled in the Area A. Imported animals by random sampling.

4.4.5 Rules of the movement of animals

In case of a positive herd for BT zoning according to the Directive 2000/75/EC will take place.

4.4.6 Tests used and sampling schemes

Tests used are antibody ELISA and PCR for BT. Tests are performed in the national reference laboratory Finnish Food Safety Authority Evira. The Dairy herds in the Area A are tested 3 times a year: August, September and November. The Area B is tested once a year. Beef cattle, sheep and goat samples are tested once a year. PCR tests are performed in case of positive antibody assays and from the samples obtained from imported animals.

4.4.7 Vaccines used and vaccination schemes

The vaccine which would be used in case BT enters to Finland is BTVPURALSap by Merial. Cattle in the Area A would be vaccinated twice.

4.4.8 Information and assessment on bio-security measures management and infrastructure

For biosecurity in Finnish dairy farms, only invited visitors are allowed and they, too, should change into protective clothing provided by the farm.

4.4.9 Measures in case of a positive result

In case of a positive results zoning according to the directive 2000/75/EC will take place. The farms within zones are tested. If there are only a few positive farms culling of all the animals susceptible to BT in the farm will take place. If BT would already be more widespread the vaccination program will take place.

4.4.10 Compensation scheme for owners of slaughtered and killed animals

The compensation will be given according to the national legislation, Eläintautilaki 80/55.

4.4.11 Control on the implementation of the programme and reporting

Evira will control the implementation of the programme and report via the Ministry of Agriculture and Forestry.

5. Benefits of the programme

Bluetongue has never been detected in Finland. However, during 2006-2008 bluetongue was spreading very rapidly in EU area and reached Sweden and later Norway. The benefit of this program is to notice as soon as possible if bluetongue is spreading into Finland. If BT would enter into Finland

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

6.1 Evolution of the disease

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

6.1 Evolution of the disease

6.1.1 Data on herds for year:

Year	Region	Total Nber of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	Indicators		
										% positive herds prevalence	% new positive herds incidence	%
Sum:												
Total:												

6.1.2 Data on animals for year:

Year	Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals prevalence	
											Sum:
Total:											

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
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6.2 Stratified data on surveillance and laboratory tests					
6.2.1 Stratified data on surveillance and laboratory tests for year :					
Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
	Area A	serological test	Elisa, Serum	128	0
	Area A	serological test	Elisa, Serum	542	0
	Area A + B	serological test	Elisa, Milk	7,527	0
	Area A +B	serological test	Elisa, Serum	234	0
2009	Whole country	microbiological or virological test	PCR	3	0
	Whole country	microbiological or virological test	PCR	9	0
	Whole country	microbiological or virological test	PCR	92	0
			Sum:	8,535	0
2008	Area A	serological test	Elisa, Serum	220	0
	Area A+B	serological test	Elisa, Serum	2,524	0
			Sum:	2,944	0
2007	Whole country	serological test	Elisa, Serum	1,007	0
			Sum:	1,007	0
2006	Whole country	serological test	Elisa, Serum	600	0
			Sum:	600	0
2005	Whole country	serological test	not done	0	0
			Sum:	0	0
			Total:	12,986	0

6.3 Data on infection for year :			
Year	Region	Number of herds Infected	Number of animal infected

Program for Eradication : PDF detail

6.5 Data on vaccination or treatment programmes for year

Year	Region	Information on vaccination or treatment programme							
		Total number of herds	Total number of animals	Number of herds in vaccination or treatment programme	Number of herds vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered	Number of adults vaccinated	Number of young animals vaccinated
Total:									

6.6 Data on wildlife

6.6.1 Estimation of wildlife population for year:

Year	Region	Species	Method of estimation	Estimation of the population
			Sum:	
Total:				

6.6.2 Monitor of wildlife for year:

Year	Region	Species	Test Type	Test Description	Number of samples tested	Number of positive samples

6.6.3 Data on vaccination or treatment of wildlife for year:

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on the testing of herds for year :

Year	Region	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of expected new positive herds	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Target Indicators		
									Expected herd coverage	% positive herds expected prevalence	% new positive herds Expected herd incidence
2,011.00	Area A	125	5	5	0	0	0	0%	100%	0%	0%
	Area A	386	386	386	0	0	0	0%	100%	0%	0%
	Area A	733	15	15	0	0	0	0%	100%	0%	0%
	Area A	1,269	1,269	1,269	0	0	0	0%	100%	0%	0%
	Sum:	2,513	1,675	1,675	0	0	0				
	Total:	2,513	1,675	1,675	0	0	0				

7.1.2.2 Targets on the testing of animals for year:

Year	Region	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested Individually	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	Expected % coverage at animal level	% positive animals (Expected animal prevalence)	
2011	Whole country	10	10	10	10	0	0	0	0	100%	0%
	Whole country	90	90	90	90	0	0	0	0	100%	0%
	Sum:	100	100	100	100	0	0	0	0		
	Total:	100	100	100	100	0	0	0	0		

rogram for Eradication : PDF detail

7.2 Targets on qualification of herds and animals for year :

Targets on the status of herds and animals under the programme

Expected not free or not free from disease

Year	Total number of herds and animals under the programme		Expected unknown		Last check positive		Last check negative		Expected free or officially free from disease status suspended		Expected free from disease		Expected officially free from disease		
	Region	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
	Sum:														
	Total:														

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment for year :

Year	NUTS Region	Total number of herds in vaccination or treatment programme		Number of herds in vaccination or treatment programme	Number of herds 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 expected to be vaccinated	Number of young animals expected to be vaccinated
		herds in vaccination or treatment programme	animals in vaccination or treatment programme						
2011	Area a	386	8,856	386	386	8,856	17,712	6,856	2,000
	Area A	1,269	30,958	1,269	1,269	30,958	61,916	22,958	8,000
	Sum:	1,655	39,814	1,655	1,655	39,814	79,628	29,814	10,000
	Total:	1,655	39,814	1,655	1,655	39,814	79,628	29,814	10,000

7.3.2 Targets on vaccination or treatment of wildlife for year

Targets on vaccination or treatment programme

