



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

SANCO/3923/2008

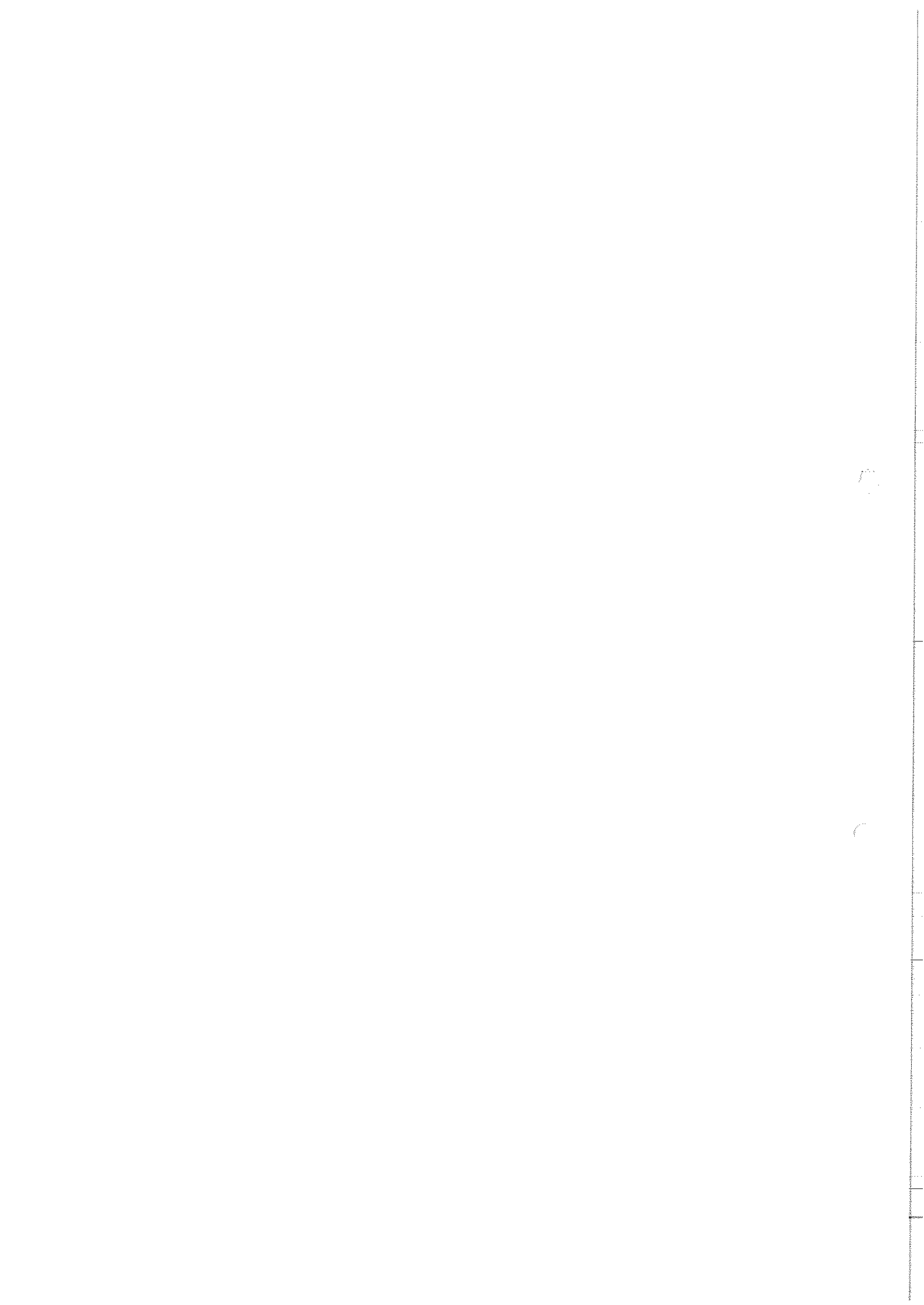
*Programmes for the eradication, control and monitoring of certain
animal diseases and zoonoses*

Eradication programme of Rabies

Approved* for 2009 by Commission Decision 2008/897/EC

Slovakia

* in accordance with Commission Decision 90/424/EEC



NATIONAL PROGRAMME

of rabies eradication in the Slovak Republic

Proposed on April 2008 for co-financing for 2009.

1. Identification of the programme

Member State: **Slovak Republic**

Disease(s)¹: **Rabies**

Request of Community co-financing for²: **2009**

Reference of this document:

Contact (name, phone, fax, e-mail):

Ján Pliešovský, DVM, PhD.

Chief Veterinary Officer

Telephone number 00 421 2 65 420 258

Fax number 00 421 2 65 420 745

Email: pliesovsky@svssr.sk

Date sent to the Commission: **29 April 2008**

2. Historical data on the epidemiological evolution of the disease(s)³:

The first oral antirabic fox's vaccination programme started in 1994. This programme ran in two campaigns, one in spring, the other one in autumn. Fix-wing airplane and by hand application were used as well. For this programme the vaccine baits containing the virus strain Vnukovo 32/107 and SAD Bern was used. In consequence of lack of money that programme was stopped after sixth campaign in 1998.

After stopping the previous oral vaccination programme the red fox rabies outbreaks rise rapidly on 387 during the year 1999. Pursuant that bad rabies situation it has been decided to start with the new oral vaccination programme against rabies for targeted species – wildlife red fox.

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

² Indicate the year(s) for which co-financing is requested.

³ 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 for distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.



The current national programme of rabies eradication, which includes the oral antirabic vaccination programme of wildlife fox, has been set up in the spring 2000. The number of outbreaks of rabies during the time of running this programme has been decreased from 375 outbreaks in the beginning on 87 in 2001 or 114 in 2002 and on 48 in 2005 or 4 in 2006 respectively. Since August 2006 no case of rabies has been detected (see Figure No. 1).

Figure No. 1

1.1.1.1. Number of cases							
<i>Species</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
Foxes	72	94	295	54	42	4	0
Other wild animals	4	3	13	6	2	0	0
Domestic carnivores	11	16	43	3	4	0	0
Other domestic animals	0	1	3	1	0	0	0
TOTAL	87	114	354	64	48	4	0

The epidemiological situation of the rabies in wildlife according to established oral vaccination programme was markedly on the mend in 2000 and 2001. Consequently the rise of the immunity status of the fox population has increased the fox density. During this fast growth of the fox population the increase of rabies positive foxes in such level at first time since beginning the programme has been recorded (295 positive foxes in 2003). According to evaluation of the rabies situation and applied programme, it was analysed that the increase of red fox rabies outbreaks was caused also by low efficiency of used SAD VA-1 strain vaccine baits in autumn 2002 and spring 2003. After evaluation of that unfavourable stay SVFA SR in 2003 has decided to change used vaccine baits for other baits, containing the reliable strain SAD Bern, for the next years. During the year 2006 there were reported 4 cases of rabies in the Slovak Republic. The same vaccine baits containing vaccination strain SAD Bern is using also after the completion new tendering for vaccine baits' supplier, according to national legislation.

3. **Description of the submitted programme**⁴:

This current programme has been run since 2000 in two campaigns, one in spring, the other one in autumn. Fix-wing airplane and by hand distributions are used as well. For this programme we have used the vaccine baits containing the virus strain Vnukovo 32/107,

⁴ 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.

titter min. $10^{6.5}$ TCID₅₀/ml (2000, 2001 and spring 2002), SAD VA-1, titter min. 10^7 TCID₅₀/ml (autumn 2002 and spring 2003) and SAD Bern, titter min. 1.8×10^7 PFU (2000, 2001, spring 2002, 2003, 2004, 2005, 2006 and 2007).

The fox population's density estimated on the number of hunted animals during the programme has been increased from 19.500 to 23.000 foxes in 2001 and very high in the second half of year 2002 and the first half of year 2003. The number of hunted fox in 2002 was 22.251 animals, what encourages us to estimate the number of fox population of 28 to 30 thousands of animals – 0,57 – 0,61 fox per square kilometre (see Figure No. 2 and Annex). This stay of fox population has been related to the comedown of the favourable progress of the rabies situation.

Figure No. 2

<i>Estimated number of target animals</i>							
<i>Species</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
Foxes	cca 23.000	cca 28.000- 30.000	cca 30.000	cca 30.000	cca 28.000- 30.000	cca 28.000- 30.000	cca 30.000- 35.000

For the year 2009 it is planed to use vaccine baits containing the virus strain SAD Bern. The distribution of vaccination baits is planed in two campaigns using by-air and by-hand distribution in spring and autumn.

The effectiveness of the oral vaccination programme will be evaluated by laboratory examinations of randomly hunted foxes and foxes hunted within the target monitoring period.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme: **11years**

First year: **2000**

Last year: **2011**

- | | |
|---|---|
| <input checked="" type="checkbox"/> Control | <input checked="" type="checkbox"/> Eradication |
| <input checked="" type="checkbox"/> Testing | <input type="checkbox"/> Testing |
| <input type="checkbox"/> Slaughter of animals tested positive | <input type="checkbox"/> Slaughter of animals tested positive |
| <input type="checkbox"/> Killing of animals tested positive | <input type="checkbox"/> Killing of animals tested positive |
| <input checked="" type="checkbox"/> Vaccination | <input type="checkbox"/> Extended slaughter or killing |
| <input type="checkbox"/> Treatment | <input type="checkbox"/> Disposal of products |
| <input type="checkbox"/> Disposal of products | |
| <input checked="" type="checkbox"/> Monitoring. | <input type="checkbox"/> Other measures (<i>specify</i>): |

4.2. *Organisation, supervision and role of all stakeholders⁵ involved in the programme:*

Ministry of Agriculture of the Slovak Republic (MA) - approves eradication programmes (Art. 5(f) and 46 of the Act No. 39/2007 Coll. on veterinary care; hereinafter only "Act No. 39/2007 Coll.")

State Veterinary and Food Administration of the Slovak Republic (SVFA) – drafts eradication programmes (Art. 6(5)(f) and 46 of the Act 39/2007 Coll.) and manages, directs and controls the performance of the state administration by the regional veterinary and food administrations (RVFA`s) and district veterinary and food administrations (DVFA`s) (Art. 6 (2)(a) of the Act 39/2007 Coll.)

Veterinary authorities (SVFA, RVFA`s and DVFA`s) – order measures in the case of suspicion of disease or in the case of the outbreak according to drawn up and approved programmes (Art. 17(3) and (4) of the Act 39/2007 Coll.) as well as co-ordinate, control and evaluate the oral vaccination programme.

Hunting association (local organisation) - perform the hunting of the foxes necessary for evaluation of efficiency of oral vaccination in the seasonal campaigns

4.3. *Description and demarcation of the geographical and administrative areas in which the programme is to be implemented⁶:*

Whole territory of the Slovak Republic, except of the places with the altitude above 1200 metres, water flows, roads communications, towns and settlements (approx. 33.150 km²)

4.4. *Description of the measures of the programme⁷:*

4.4.1. Notification of the disease:

Based on the § 17(2) and 37(2)(a) of the Act No. 39/2007 Coll. each natural or legal person authorized to dispose of live animals is obliged to notify without delay to the veterinary administration authority any suspicion or outbreak of the disease and to allow examination of animal sick or suspected.

In case of failing to notify any suspicion or outbreak of the disease or failing to allow the examination of animal sick or suspected, is according to Act No. 39/2007 Coll. committed

- a natural person - an offence according to the Article 48(1)(a) and a penalty shall be imposed according to the Article 48(2) up to 20 000 SKK,
- a legal or natural person authorized to perform business activities - an administrative infringement according to the Article 50(g) and a penalty shall be imposed according to the Article 51(d) from 1 000 000 SKK up to 5 000 000 SKK,

⁵ Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Describe the responsibilities of all involved.

⁶ 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.

⁷ A comprehensive description needs to be provided of all measures unless reference can be made to Community legislation. The national legislation in which the measures are laid down is mentioned.

In case of failing to notify any suspicion or outbreak of disease and causing to spread the disease, any natural person may be jailed for up to three years according to Article 307 of the Act No. 300/2005 Coll. Criminal Code

4.4.2. Target animals and animal population:

The target animal species of this programme is the wildlife red fox. The population of the red fox is during the implementation of the programme continuously increased. The expected number of living wildlife red fox according to hunting bag is 30.000 to 35.000 animals (see Figure No. 2 above)

4.4.3. Identification of animals and registration of holdings:

For purposes of this national rabies eradication programme holding means any individual owner or keeper of susceptible domestic animal or hunting ward in the case of wildlife, where the person in charge is the hunter manager.

Basic condition of eradication of rabies in domestic animals is registration and identification of dogs, which is laid down in § 3 of the Act No. 282/2002 Coll., which provides some conditions of dog keeping, according to which dogs must be identified and registered by local self-administration authority.

The another legal rule governing requirements for movements of the pet animals is the Regulation of the European Parliament and Council (EC) No. 998/2003 on the animal health requirements applicable to non-commercial movements of pet animals and amending Council Directive 92/65/EEC in the later amendments (Commission Decision 2003/803/EC establishing a model passport for the intra-Community movements of dogs, cats and ferrets and Commission Decision 2004/203/EC establishing a model health certificate for non-commercial movements from third countries for dogs, cats and ferrets, Commission Decision 2004/595/EC establishing a model health certificate for the importation into the Community for dogs, cats and ferrets) implemented in the Slovak Republic by Act No. 39/2007 Coll., in particular Articles 6(2)(p) and (v) and Article 19(3), (4), (5) and (10).

The requirements for participation (movement's requirements) of dogs, cats or ferrets in mass actions (shows, exhibitions, competitions...) are the same as for intra-Community movements: a clearly readable tattooing or preferably electronic identification system (transponder) conforming with the standard ISO 11784 which is possible to check by reading device in compliance with standard ISO 11785 and valid vaccinations. If the animal is identified with a transponder, which is not in compliance with above-mentioned ISO standard, the keeper is obliged, at check of identity of the animal at entrance for mass action, to provide the reading device which enables to identify their dog, cat or ferret.

Proof of the presence of antibodies in pursuance of the control of vaccination for the fulfilment of condition for movements of domestic carnivores in international trade or in non-commercial movements as well as the control of oral antirabic vaccination is carried out by approved laboratory State Veterinary Institute Zvolen (Commission Decision 2004/448/EC).

4.4.4. Qualifications of animals and herds:

In the case of rabies they are only two possibilities:

- the animal/s is/are suspected or positive of rabies – measures taken according points 4.4.5. or 4.4.9.
- the animal/s is/are not suspected or positive of rabies – no measures, free movements under conditions of Ordinance of the Government of the Slovak Republic No. 313/2003 (Council Directive 92/65/EEC) and Regulation of the European Parliament and of Council (EC) No. 998/2003.

4.4.5. Rules on the movement of animals:

All domestic carnivores older than three month of age must be vaccinated against rabies with yearly revaccination recorded in the vaccination book or pet passport. Animals fulfilling these requirements might be moved on the territory of the Slovak Republic freely except of outbreaks or areas under veterinary measures ordered in accordance to occurrence of the disease transmissible to or by such animals.

In the case of suspicion of rabies, the respective District Veterinary and Food Administrations orders the measures in compliance with the Article 8(3)(f) and Article 17(3) of the Act No. 39/2007 Coll.

The respective DVFA at suspicion of rabies occurrence in **domestic animals** orders to natural and legal persons the measures for control of animal diseases and determines the date for their fulfilment, by which

a) it orders

1. catching of stray animals by professionally eligible natural or legal persons which means a person who following passing an examination before board of examiners completed the training Catching of stray or lost animals at the Institute for Postgraduate Studies of Veterinary Surgeons in Košice and obtained a Certificate on professional eligibility for the performance of catching of lost, abandoned and stray animals or by other person performing this activity under the supervision of professionally eligible natural or legal person,
2. disinfection of the place of killing or death of suspectly rabid animal and also thorough disinfection and incineration of all items which could have come into contact with such animal,
3. safe disposal of dead and killed animals by rendering plant after sampling,
4. isolation and monitoring of all susceptible animals which came or could have come into contact with an animal suspected of rabies,
5. safe disposal of milk obtained from cows suspected of rabies and prohibition of the use of products of warm-blooded animals for human consumption and for feeding purposes if these animal came or could have come into contact with an animal suspected of rabies,
6. obligation to report each case of exposition of people and/or animals, behaviour changes in domestic animals, death of domestic animals and/or wildlife in an outbreak and in its nearness,

b) it prohibits

1. movement and collection of susceptible animal species,
2. free movement of susceptible animals in an outbreak,

The respective DVFA, in case of rabies is NOT confirmed, lifts the measures for disease control, in otherwise orders the measures in accordance to point 4.4.9.

The respective DVFA at suspicion of rabies occurrence **in wildlife** orders to natural and legal persons the measures for control of animal diseases and determines the date for their fulfilment, by which

a) it orders

1. catching of stray animals by professionally eligible natural or legal persons which means a person who following passing an examination before board of examiners completed the training Catching of stray or lost animals at the Institute for Postgraduate Studies of Veterinary Surgeons in Košice and obtained a Certificate on professional eligibility for the performance of catching lost, abandoned and stray animals or by other person performing this activity under the supervision of professionally eligible natural or legal person,
2. disinfection of the place of destroying or death of rabid animal and also thorough disinfection and incineration of all items which could have come into contact with rabid animal,
3. safe disposal of dead and killed animals by rendering plant after sampling,
4. isolation and monitoring of all susceptible animals which came or could have come into contact with an animal suspicious of rabies,
5. obligation to report each case of exposition of people and animals, behaviour changes in domestic animals, death of wildlife in an outbreak and in its nearness,
6. to hunt the wildlife animals suspected of rabies (showing signs according to the point „Instruction on the disease” of National rabies eradication programme) to the respective user of hunting ground

b) it prohibits

1. movement and collection of susceptible animal species,
2. free movement of susceptible domestic animals in an outbreak,
3. catching of wildlife for further breeding.

The respective DVFA, in case of rabies is NOT confirmed, lifts the measures for disease control, in otherwise orders the measures in accordance to point 4.4.9.

4.4.6. Tests used and sampling schemes:

- serological tests : **ELISA** – home made – blocking system using biotinylated goat polyclonal antibodies for detection anti G protein antibodies
FAVN – modify with immunoperoxidase detection of virus (WHO, 1996; OIE 2000)
- virological tests: **FAT** – antigen detection on impressions or smears with FITC conjugated antibodies (WHO, 1996; OIE 2000)
MIT – mouse inoculation test (WHO, 1996; OIE 2000)

Confirmation of Rabies field virus:

Indirect immunoperoxidase technique using monoclonal antibodies: W 187.5, W 187.6, Z 144.88 (purchased from Tübingen)

RFLP – on amplicons of Ψ pseudogene using TAQ1 restriction endonuclease (WHO, 1996)

Typing of Rabies virus:

Indirect immunoperoxidase technique using monoclonal antibodies: W 239.17, W 187.5, W 187.11, MW 187.6, MSA 6.3, LBV 7.3.6, DUV 6.15, S 62 1.2, P 41, Z 144.88 (purchased from Tübingen)

RFLP – on amplicons of N gene using BsaBI, Nla IV, Mbo II, Hind III restriction endonucleases (published by Bourhy et al., 1999)

- other used tests: **PCR** method using *Lyssavirus*-specific primers (WHO, 1996)
Virus cultivation on Neuro-2a cell cultures in microtitration plate. Visualisation of antigen is performed with indirect immunoperoxidase technique using sheep polyclonal serum (WHO, 1996; OIE 2000)

- monitoring of vaccination:

Serology post vaccination:

ELISA – home made – blocking system using biotinylated goat polyclonal antibodies for detection anti G protein antibodies

FAVN – modify with immunoperoxidase detection of virus (WHO, 1996; OIE 2000)

TTC marker detection:

Fluorescent microscopy (published by Stöhretal et al., 1990)

Evaluation of bait intake:

3rd, 8th and 14th day following by hand distribution of vaccination baits is evaluated bait intake in selected areas of extent of 1 km² (6 areas per each season campaign)

- sampling scheme:

- all domestic, farm and wild warm-blooded animals suspicious of rabies have to be sent for laboratory examination - the whole carcass up to 50 kg or the head with first two vertebrae in the case of heavier animal,
- from 45th day following of seasonal oral vaccination campaign the users of hunting grounds carry out the shooting of foxes intended for control of efficiency of seasonal campaign of oral antirabic vaccination of foxes in compliance with the instructions of DVFA. It is inevitable to submit for laboratory examination at least 1 fox per hunting ground, however, the cubs and foxes with deciduous teeth are excluded. The needed number of submitted foxes is 8 head per 100 km² a year from the whole territory of the Slovak Republic;
- the date of completion of the control of oral vaccination efficiency is on 90th day from the beginning of the control of oral vaccination efficiency or it is stated by SVFA SR by special letter,
- it is necessary to wrap up the hunted fox into two impermeable packings (for example PVC bags), with an absorbent material between them and to deliver within 48 hours to the DVFA; DVFA delivers the material to the respective State Veterinary and Food Institute for laboratory examination,
- the principles for work with infection material is necessary to follow by sampling.
- the State Veterinary and Food Institutes send to the State Veterinary Institute Zvolen (SVI Zvolen) within seven days following the IF testing the samples of neural tissue from all positive animals for the purpose of

- confirmation of rabies virus and immediately inform the SVFA about the sending of the samples for confirmation of IF positive tissue,
- the State Veterinary and Food Institutes send to the State Veterinary Institute Zvolen (SVI Zvolen) by the end of the first week following ending the monitoring period the samples of transsudate or cruor and part of jaw-bone from all examined animals intended for the control of efficiency of oral antirabic vaccination of foxes,
 - the evaluation of the results of the vaccination campaign is done after receiving of all laboratory results by advisory body of CVO for rabies,
 - The efficiency tests of vaccination baits are performed only by SVI Zvolen.

4.4.7. Vaccines used and vaccination schemes:

Oral vaccination of wildlife red foxes

- vaccines (type, dosage): **Lysvulpen por. a.u.v.** (SAD Bern $1,8 \times 10^7$ PFU)

By air distribution:

26 baits per 1 km² applied in two lines (distance of 500 m) flying height 150 m, flying speed of 150 km/h. At by air distribution the places with the altitude above 1200 metres, water surfaces, road communications, towns and settlements are omitted.

By hand distribution:

18 baits per 1 km² on selected areas (periphery and parks of ten big towns)

- vaccination scheme: the oral vaccination is performed in two seasonal campaigns - in the spring (end of March to beginning of May) and in the autumn (end of September to beginning of November)

Vaccination of domestic animals:

- each domestic carnivore older than three months of age must be vaccinated against rabies with yearly revaccination according to Article 17 (5) of Act No. 39/2007 Coll. and the vaccine manufacturer's recommendations
- vaccines (approved) and vaccination schemes, if recommended:

Biocan R inj. a.u.v. (Biocan LR inj. a.u.v.) - from 12 weeks of age

Canigen DHA2PPi/LR inj. sicc. a.u.v.

Canvac R inj. a.u.v. - since one month of age in the case of animals born to unvaccinated mothers (illegal in SK), in otherwise the vaccination after 5th month of age is sufficient

Eurican DHPPi2-LR inj. sicc.a.u.v. - from 3 months of age

Hexadog inj. sicc. a.u.v. - from 3 months of age

Nobivac Rabies inj. a.u.v.

Rabisin inj. a.u.v. - since 4 weeks of age in the case of animals born to unvaccinated mothers (illegal in SK), in otherwise from 11th weeks of age

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

Non applicable.

4.4.9. Measures in case of a positive result⁹:

The measures in case of positive result on rabies are ordered by the District Veterinary and Food Administrations in compliance with the Article 8(3)(f) and Article 17(3) of the Act No. 39/2007 Coll.

The respective District Veterinary and Food Administration at confirmation of rabies occurrence **in domestic animals** extends the previous measures for disease control by further measures (see measures taken in the case of suspicion in point 4.4.5.) for disease control and determines to the natural and legal persons the date for their fulfilment by which

- a) it defines an rabies outbreak,
- b) it orders in an outbreak
 1. marking it with warning tables with wording „CAUTION RABIES !”
 2. killing of susceptible animals which came into contact with an animal positive to the presence of rabies antigen,
 3. to perform the registration of dogs and cats and protective vaccination of dogs, cats and other carnivore over 3 months of age which have not been vaccinated against rabies so far or since the last antirabic vaccination or re-vaccination period elapsed, provided that they did not come into contact or they did not have the possibility to come into contact with an animal positive to the presence of rabies antigen,
 4. to perform protective vaccination of susceptible domestic animals; it will permit to use of the milk and other products obtained from them for the human consumption and feeding purposes only following gained immunity (this period will be stated based on the date of vaccine manufacturer).

The respective DVFA at confirmation of rabies occurrence **in wildlife** extends the previous measures for disease control by further measures (see measures taken in the case of suspicion in point 4.4.5.) for disease control and determines to the natural and legal persons the date for their fulfilment by which

- a) it defines an rabies outbreak,
- b) it orders in an outbreak
 1. its marking with warning tables with wording „CAUTION RABIES !”
 2. killing of susceptible animals which came into contact with an animal positive to the presence of rabies antigen,
 3. to perform the registration of dogs and cats and protective vaccination of dogs, cats and other carnivore over 3 months of age which have not been vaccinated against rabies so far or since the last antirabic vaccination or re-vaccination period elapsed, provided that they did not come into contact or they did not have the possibility to come into contact with an animal positive to the presence of rabies antigen,

⁹ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around the infected holding,).

4. to perform protective vaccination of cattle, sheep and goats in pasture and to stable the animals until gaining the immunity (this period will be stated based on the date of vaccine manufacturer).

The holding or cadastre of the municipality or other geographically defined area, in which the rabid animal was kept, hunted or found, is defined as a rabies outbreak, based on confirmation of rabies occurrence by laboratory diagnostics (see point 4.4.6.).

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

The Ministry of Agriculture of the Slovak Republic

- provides subsidies to breeders in compliance with the Act No. 240/1998 Coll. on Agriculture and on amendment of other acts,
- Decree of the Ministry of Agriculture of the Slovak Republic on support of enterprise in agriculture

Insurance companies

- meet losses within insurance contract

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

The Veterinary Officer of Regional Veterinary and Food Administration carry out the supervision on by air and by hand application of the vaccine baits. The supplier handed out the vaccine baits on the airport or at the RVFA Office to the RVFA Veterinary Officer, which checks the stay of repair of the vaccine baits, their packaging, check batch number and number of supplied vaccine baits for each supply and may take the sample of the baits. The results of their checks and sampling of the baits (if done) he report next day morning to SVFA by e-mail.

The supplier reports the area, number of applied vaccination baits and submit the GPS maps at least by submission of the invoice for the supplied vaccination baits (usually after completion of application from one of selected airports).

SVFIs and SVI Zvolen submits the results of laboratory tests to respective DVFA and to SVFA no later than 3 days after receiving the samples for rabies investigation.

After completion of the results of laboratory tests of evaluation of the efficacy of the oral vaccination campaign, the advisory body of CVO for rabies evaluates the effectiveness of the seasonal campaign.

SVFA reports to Commission the implementation of the programme in accordance to current EU legislation.

5. Benefits of the programme¹⁰:

- health status in wildlife and domestic animals will be improved,
- the danger of rabies transmission to domestic animals and a men will be reduced,
- barriers at movement of carnivores and other susceptible animal species will be removed,
- the expenses from the state budget invested for prevention and control of rabies in the jurisdiction of ministry of agriculture and ministry of health will be reduced,

¹⁰ A description is provided of the benefits for farmers and society in general.

- protection of neighbouring countries against introduction of rabies from the territory of the Slovak Republic will be ensured.

6. Data on the epidemiological evolution during the last five years¹¹

6.6. Data on wildlife¹²

6.6.1. Estimation of wildlife population

Year: 2003

Method of estimation^(a): Hunting bag

Regions ^(b)	Estimation of the population of the concerned wild species	
	Species: red fox	Species:
Slovak Republic	30.000	
Total	30.000	

Year: 2004

Method of estimation^(a): Hunting bag

Regions ^(b)	Estimation of the population of the concerned wild species	
	Species: red fox	Species:
Slovak Republic	30.000	
Total	30.000	

¹¹

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

¹²

Data only to provide in case the programme comprises measures as regards wildlife or if the data are epidemiologically relevant for the disease.

Year: 2005

Method of estimation^(a): Hunting bag

Regions ^(b)	Estimation of the population of the concerned wild species		
	Species: red fox	Species:	Species:
Slovak Republic	28.000 - 30.000		
Total	28.000 - 30.000		

Year: 2006

Method of estimation^(a): Hunting bag

Regions ^(b)	Estimation of the population of the concerned wild species		
	Species: red fox	Species:	Species:
Slovak Republic	28.000 - 30.000		
Total	28.000 - 30.000		

Year: 2007

Method of estimation^(a): Hunting bag

Regions ^(b)	Estimation of the population of the concerned wild species		
	Species: red fox	Species:	Species:
Slovak Republic	30.000 - 35.000		
Total	30.000 - 35.000		

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

Year: 2003 Disease: Rabies Animal species: Wildlife red fox

Description of the used serological tests: ELISA, FAVN

Description of the used virological tests: FAT, MIT

Description of the other used tests: RT-PCR, Virus isolation on cell culture, IF

Region(s)	Virological tests		Serological tests		Other tests IF (TTC)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
Slovak Republic	1791	295	1051	486	1127	796

Year: 2004 Disease: Rabies Animal species: Wildlife red fox

Description of the used serological tests: ELISA, FAVN

Description of the used virological tests: FAT, MIT

Description of the other used tests: RT-PCR, Virus isolation on cell culture, IF

Region(s)	Virological tests		Serological tests		Other tests IF (TTC)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
Slovak Republic	1.563	54	716	267	864	629

Year: 2005 Disease: Rabies Animal species: Wildlife red fox

Description of the used serological tests: ELISA, FAVN

Description of the used virological tests: FAT, MIT

Description of the other used tests: RT-PCR, Virus isolation on cell culture, IF

Region(s)	Virological tests		Serological tests		Other tests IF (TTC)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
Slovak Republic	1767	42	1078	282	1279	838

Year: **2006** Disease: **Rabies** Animal species: **Wildlife red fox**

Description of the used serological tests: **ELISA, FAVN**

Description of the used virological tests: **FAT, MIT**

Description of the other used tests: **RT-PCR, Virus isolation on cell culture, IF**

Region(s)	Virological tests		Serological tests		Other tests (TTC)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
Slovak Republic	3630	4	3098	1109	3289	2591

Year: **2007** Disease: **Rabies** Animal species: **Wildlife red fox**

Description of the used serological tests: **ELISA, FAVN**

Description of the used virological tests: **FAT, MIT**

Description of the other used tests: **RT-PCR, Virus isolation on cell culture, IF**

Region(s)	Virological tests		Serological tests		Other tests IF (TTC)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
Slovak Republic	4309	0	3000	1115	3129	2315

6.6.3. Data on vaccination or treatment of wildlife

Year: 2003 Disease: Rabies Animal species: Wildlife red fox

Description of the used vaccination: Oral vaccination (Vaccine strains 1. SAD Bern 1, 8 x 10⁷ PFU, 2. SAD VA-1 10⁷ TCID₅₀/ml)

Region(s)	Square km	Vaccination programme		
		Number of doses of vaccine to be administered	Number of campaigns	Total number of doses of vaccine administered
Slovak republic – spring (1.+2.)	33.278	699.950	1	699.950
Slovak republic –autumn (1.)	33.278	727.400	1	727.400
Total	33.278	1.427.350	2	1.427.350

Year: 2004 Disease: Rabies Animal species: Wildlife red fox

Description of the used vaccination: Oral vaccination (Vaccine strains SAD Bern 1, 8 x 10⁷ PFU)

Region(s)	Square km	Vaccination programme		
		Number of doses of vaccine to be administered	Number of campaigns	Total number of doses of vaccine administered
Slovak republic – spring	33.278	876.000	1	876.000
Slovak republic –autumn	33.278	868.500	1	868.500
Total	33.278	1.744.500	2	1.744.500

Year: 2005 Disease: Rabies Animal species: Wildlife red fox

Description of the used vaccination: Oral vaccination (Vaccine strains SAD Bern 1, 8 x 10⁷ PFU)

Region(e)	Square km	Vaccination programme		
		Number of doses of vaccine to be administered	Number of campaigns	Total number of doses of vaccine administered
Slovak republic – spring	33.153	856.900	1	856.900
Slovak republic –autumn	33.153	856.900	1	856.900
Total	33.153	1.713.800	2	1.713.800

Year: 2006 Disease: Rabies Animal species: Wildlife red fox

Description of the used vaccination: Oral vaccination (Vaccine strains SAD Bern 1, 8 x 10⁷ PFU)

Region(e)	Square km	Vaccination programme		
		Number of doses of vaccine to be administered	Number of campaigns	Total number of doses of vaccine administered
Slovak republic – spring	33.153	856.900	1	856.900
Slovak republic –autumn	33.153	856.900	1	856.900
Total	33.153	1.713.800	2	1.713.800

Year: 2007 Disease: Rabies Animal species: Wildlife red fox

Description of the used vaccination: Oral vaccination (Vaccine strains SAD Bern 1, 8 x 10⁷ PFU)

Region(s)	Square km	Vaccination programme		
		Number of doses of vaccine to be administered	Number of campaigns	Total number of doses of vaccine administered
Slovak republic – spring	33.153	856.900	1	856.900
Slovak republic –autumn	33.153	856.900	1	856.900
Total	33.153	1.713.800	2	1.713.800

7. Targets

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

7.1.1. Targets on diagnostic tests

Disease^(a): Rabies

Animal species: Wildlife red fox

Region ^(b)	Type of the test ^(c)	Target population ^(d)	Type of sample ^(e)	Objective ^(f)	Number of planned tests
Slovak Republic	FAT	wildlife red fox and susceptible animal species	brain	surveillance and effectiveness of campaigns	4.000
Slovak Republic	ELISA	wildlife red fox	blood	effectiveness of campaigns	3.000
Slovak Republic	Fluorescence test (TTC)	wildlife red fox	mandibula	effectiveness of campaigns	3.000
Slovak Republic	Titration of virus	vaccination baits	vaccine	effectiveness of campaigns	30
Total					10.030

7.3.2. *Targets on vaccination¹³ of wildlife*

Disease^(a):

Animal species:

Region ^(b)	Square km	Targets on the vaccination programme		
		Number of doses of vaccine expected to be administered in the campaign	Expected number of campaigns	Total number of doses of vaccine expected to be administered
Slovak Republic	33.153	856.900	2 (spring and autumn)	1.713.800
Total	33.153			1.713.800

¹³ Data to provide only if appropriate.

8. Detailed analysis of the cost of the programme (one table per year of implementation)

<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>
<i>1. Testing</i>					
<i>1.1. Cost of the analysis</i>					
	<i>Test: FAT</i>	4000	23,75	90.000	yes
	<i>Test: ELISA</i>	3000	13,55	40.650	yes
	<i>Test: TTC detection (IF)</i>	3000	10,2	30.600	yes
	<i>Test: MIT</i>	100	22	2.200	yes
	<i>Test: Titration of vaccination baits</i>	30	50,85	1.525,50	yes
	<i>Test: Typing of virus</i>	5	68,85	344,25	yes
<i>1.2. Cost of sampling</i>	<i>costs of cartridge (shot), packaging, transport</i>	4000	13,55	54.200	yes
<i>1.3. Other costs</i>					
<i>2. Vaccination</i>					
<i>2.1. Purchase of vaccine</i>	<i>LYSVULPEN por. a.u.v.</i>	1.713.800	0,3	514.140	yes
<i>2.2. Distribution costs</i>	<i>by airplane distribution</i>	1.689.800	0,18	304.164	yes

<i>2.3. Administering costs</i>									
<i>2.4. Control costs</i>									
<u>3. Slaughter and destruction</u>									
<i>3.1. Compensation of animals</i>									
<i>3.2. Transport costs</i>									
<i>3.3. Destruction costs</i>									
<i>3.4. Loss in case of slaughtering</i>									
<i>3.5. Costs from treatment of products (milk, eggs, hatching eggs, etc)</i>									
<u>4. Cleaning and disinfection</u>									
<u>5. Salaries (staff contracted for the programme only)</u>									
<u>6. Consumables and specific equipment</u>									
<u>7. Other costs</u>									
TOTAL								1.037.823,75	yes