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

SANCO/3912/2008

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

Monitoring and eradication programme of TSE, BSE and scrapie

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

Slovenia

* in accordance with Commission Decision 90/424/EEC

SLOVENIA

TSE Monitoring and Eradication Programme

2009

Veterinary Administration of the Republic of Slovenia

1. Identification of the programme

Member State: **SLOVENIA**

Disease(s)[1]: **TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHIES (TSEs)**

Year of implementation: **2009**

Reference of this document: xx

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2. Description of the programme

This is the programme for monitoring, control and eradication of BSE/TSE in 2009. The tests for BSE/TSE will continue in the Republic of Slovenia under the following programme:

A. Bovine animals (BSE):
- examination **of all bovine** animals (all ages) showing clinical signs of BSE - BSE suspects,
- examination of **all bovine** animals killed under eradication measures in accordance with point 2 (a) of Annex VII of Regulation 999/2001 EC.
- examination of **all emergency slaughtered bovine** animals, **all sick animals** (clinical signs at ante mortem) intended for slaughter on the basis of a veterinary referral form, and all dead animals – fallen stock aged more than 24 months,
- examination of **all healthy slaughtered bovine animals** aged more than 30 months;
-

B. Ovine and caprine animals (TSE):
- examination of **all ovine and caprine animals** aged more than 18 months, showing clinical signs of wasting, emergency slaughtered animals, sick animals intended for slaughter on the basis of a veterinary referral form,
- examination of **all** dead **ovine and caprine animals** aged more than 18 months,
- monitoring of infected flocks **(slaughtered and non slaughtered animals)** – minimum sample size in accordance with Annex III and Annex VII of TSE Regulation;

C. Ovine and caprine animals (genotyping):
- genotyping of each positive TSE case in sheep,
- genotyping of randomly selected sheep from flocks in eradication,
- genotyping under the requirements of eradication – genotyping and partial depopulation of infected flocks,

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

- genotyping of breeding sheep under the framework of a breeding programme as established in Chapter B, Annex VII of TSE Regulation
- genotyping of randomly selected sheep from flocks.

D. Other animals. (TSE):
- monitoring of TSE in wild animals – cervids;

E. Eradication of TSE: killing and complete destruction of animals under the requirements of Annex VII of the Regulation (EC) 999/2001.

F. Discriminatory testing of all animals which are regarded as positive Scrapie cases

3. Description of the epidemiological situation of disease

BSE

In order to assess the situation, the Republic of Slovenia has been carrying out the BSE monitoring programme since 1996. Since the beginning of 2001, i.e. upon the introduction of the rapid post mortal test to diagnose BSE, eight BSE cases were confirmed in Slovenia. **Five cases were confirmed in fallen stock** within the monitoring and surveillance programme, two cases was confirmed in healthy slaughtered cow and the last case was found by slaughtering **sick animal** showing clinical signs at ante mortem examination. Positive cases and the number of animals tested from 2001 – 2007 are shown in Table 1. More information on positive cases is shown in Table 2.

Table 1: Number of bovine animals tested per year and positive cases

Year	Number of animals tested	Number of positive cases
2001	32,616	1
2002	64,496	1
2003	66,167	1
2004	45,666	2
2005	36,784	1
2006	32,667	1
2007	31,384	1
TOTAL	**309,780**	**8**

Table 2: Positive BSE cases in Slovenia (until April 2007)

CASE	MONTH AND DATE OF BIRTH	RISK GROUP	RAPID TEST	CONFIRMATORY TEST	DATE OF CONFIRMATION
1	22.9.1996	FALLEN STOCK	PRIONICS CHECK -	HISTOPATHOLOGY IMMUNOHISTOCHEMISTRY	20.11.2001
2	5.10.1995	FALLEN STOCK	PRIONICS CHECK - W	HISTOPATHOLOGY IMMUNOHISTOCHEMISTRY	21.1.2002
3	12.7.1999	FALLEN STOCK	PRIONICS CHECK - W	PLATELIA TEST (ELISA) HISTOPATHOLOGY	17.3.2003

				IMMUNOHISTOCHEMISTRY	
4	9.1.2000	FALLEN STOCK	Enfer, PRIONICS CHECK - W	HISTOPATHOLOGY IMMUNOHISTOCHEMISTRY	26.03.2004
5*	20.4.1998	FALLEN STOCK	Enfer, PRIONICS CHECK - W	HISTOPATHOLOGY IMMUNOHISTOCHEMISTRY	27.7.2004
6	9.6.2000	HEALTHY SLAUGHTERED	PRIONICS CHECK – WESTERN, PRIONICS LIA, PRIONICS STRIP POSITIVE	IMMUNOHISTOCHEMISTRY WESTERN BLOT	24.8.2005
7	23.1.2000	HEALTHY SLAUGHTERED	PRIONICS LIA	HISTOPATHOLOGY IMMUNOHISTOCHEMISTRY	6.11.2006
8	18.12.2000	CLINICAL SIGNS AT ANTE MORTEM	Enfer, PRIONICS CHECK - W	HISTOPATHOLOGY IMMUNOHISTOCHEMISTRY	3.4.2007

*** Animals imported from Germany as pregnant heifers**

TSE in small ruminants

Scrapie has been known internationally for over 200 years. It is present in most sheep and goat producing countries in the world. In common with other TSEs it has a long incubation period. Peak incidence of clinical signs is seen in 3 to 4 year old sheep. There is evidence that significant infection of the tissues of infected animals with the scrapie agent occurs months before clinical signs appear. The course of the clinical disease may be weeks or months. The signs of scrapie are variable and non-specific and can include itchiness (resulting in "scraping" against fences etc.), nervous signs (including lack of co-ordination, head pressing and teeth grinding) and change in temperament. Weight loss may be variable. The disease is non-febrile. At present diagnostic methods for pre-clinical cases are still under development. Tests currently proposed for the diagnosis of scrapie in live animals are impractical for large-scale screening and a definitive diagnosis can only be made on tissues after death.
Lambs can be infected by their infected dams around the time of birth with the placenta being a major source of the infectious agent. It is traditionally recognised that horizontal transmission may occur at this time also via the oral route.

The incubation period of scrapie is determined by the genes of the host animal. Some genetic types have a shorter incubation period from infection to when clinical signs of the disease become apparent than do others. It has been shown that the single autosomal gene which determines the length of the incubation period in mice is similar to, if not in fact the same as, the gene which codes for the prion protein. It has also been recognised that the genotype of the (normal) PrP gene in sheep is a major factor controlling the development of the clinical signs of scrapie. Variations in the coding areas of the PrP gene in sheep (at locations 136, 154 and 171) determine susceptibility (or "resistance") to the clinical signs of scrapie.

Sheep and goat censuses are conducted regularly. In 2006, 131,528 sheep and 27,798 goats were recorded in Slovenia. The size of sheep flocks varies, but most flocks are small with an average of 23 sheep and 6 goats.

Table 3: Number of sheep and goats in Slovenia (2006)

Number of goats, Slovenia, 2006	
Goats - TOTAL	27.798
Kids and young goats	4.902
Breeding female goats - TOTAL	20.215
Breeding female goats, first mating, milk breed	971
Breeding female goats, first mating, other breeds	2.164
Breeding female goats, have given birth before, milk breed	3.222
Breeding female goats, have given birth before, other breeds	13.858
Male goats	2.063
Other female goats	618
Number of sheep, Slovenia, 2006	
Sheep - TOTAL	131.528
Lambs and young female sheep	36.221
Breeding female sheep - TOTAL	89.120
Breeding female sheep, first mating, milk breed	1.190
Breeding female sheep, first mating, other breeds	8.029
Breeding female sheep, have given birth before, milk breed	2.876
Breeding female sheep, have given birth before, other breeds	77.025
Male sheep	5.490
Other female sheep	698
Source: Statistical Office of the Republic of Slovenia, 2006	

Monitoring of sheep and goats: Each year, the Minister of Agriculture, Forestry and Food issues the *Rules on the systematic monitoring of contagious animal diseases and vaccination* for that particular year, including at least the tests prescribed in Annex III to the Regulation (EC) No 999/2001. The sampling and test costs are covered by the state. TSE monitoring of ovine and caprine animals started in Slovenia in 2002, when we tested 384 sheep and 182 goats. In July 2004 we detected the first TSE case in a sheep, or the first scrapie case in Slovenia, in a farm with approximately 900 animals. Until the end of 2007 we have confirmed 167 ovine and 4 caprine scrapie cases, among them 7 primary cases and 164 secondary cases.

Table 4: TSE tests and number of primary and secondary cases in the period 2002–2005

Monitoring year	Number of tests (sheep)	Number of primary cases (sheep)	Number of secondary cases (sheep)	Number of tests (goats)	Number of primary cases (goats)	Number of secondary cases (goats)	Total of number of cases (sheep and goats)
2002	384	0		182	0		0
2003	567	0		182	0		0
2004	1067	**1**	11	261	0	**0**	**12**
2005	2188	**4**	97	590	0	**4**	**105**
2006	2040	**1**	41	386	0	**0**	**42**
2007	2047	**1**	11	429	0	**0**	**12**
Total	**8293**	**7**	**160**	**2030**	**0**	**4**	**171**

Suspect and positive TSE cases

All TSE suspect cases in sheep and goats must be reported immediately. Livestock owner must provide all necessary assistance to the authorities. All cases notified as suspect are subject to official veterinary supervision: TSE suspects and TSE positive animals shall not be placed on the market, and the farm shall be placed under temporary restrictions, by:

- restriction on animal movements from and to the farm;
- requiring dead animal carcasses to be collected in the collection centres approved according Regulation 1774/2002;
- banning the on-farm slaughter of animals intended for the household consumption;
- specifying the species and number of animals affected by the ban.

Once notified, the Regional Office of VARS shall immediately delegate an official veterinarian to conduct the enquiry and institute and supervise all the necessary measures. The regional authority (official veterinarian) must be in close contact with the Main Office of VARS.

The suspect animal shall be killed on the basis of an official requirement, and the tissue samples taken shall be subjected to laboratory diagnosis. If the suspicion is not confirmed by laboratory testing, the restrictions must be lifted immediately.

If a case of TSE in sheep and goats is confirmed by laboratory testing, the restrictions shall be maintained and the Main Office of VARS consulted regarding further action. As first measure all animals in the flock must be identified individually. Further investigations, such as genotyping in accordance with Annex III, Chapter A (II) (4) and (7.1) to the Regulation (EC) No 999/2001, must be carried out. An intensive epidemiological investigation must be carried out around the positive case. Parents, offspring and contact animals must be identified. Ova and embryos must be identified and destroyed in accordance with the Regulation (EC) No 999/2001. At present, the entire flock destruction is required in case of small flocks (up to 20 animals) and

genotyping and partial depopulation is required in case of larger flocks. Any restocking of farms shall be carried out in accordance with the Regulation (EC) No 999/2001.

Eradication measures are currently carried out in seven holdings. Female goats and lambs which were not eligible for further breeding were euthanized and harmlessly disposed of. Female sheep, male sheep and lambs which were eligible for further breeding were genotyped and, on the basis of genotyping results, the clinically suspect animals, animals of a genotype including the VRQ allele but no ARR allele, and rams of non-complying genotypes (all except those with the ARR/ARR homozygote) were euthanized. Rams of the ARR/ARR genotype were introduced into the holding. Strict conditions regarding animal movement restrictions from and to the holding were instituted at the infected holding, in accordance with points 4 and 7 of Annex VII to the Regulation (EC) No 999/2001.

In two holdings, scrapie was confirmed in breeding rams that had been born in the holding where the second scrapie case in Slovenia was confirmed. As the male animals do not play an important role in Scrapie transmission, we do not carry out eradication measures according to Annex VII to the Regulation (EC) No 999/2001 in these holdings, as the eradication measures had already been carried out in the holdings of origin of the animals. Nevertheless, more strict controls are carried out in such holdings by checking the herds for clinical signs of disease and by compulsory TSE-tests of all dead animals aged more than 18 months.

TSE – Other animal species

Tests for TSEs in wild game within the scope of research projects have been carried out in Slovenia ever since 2002. Table 5 shows tests for TSEs in other animal species carried out in Slovenia. All tests were negative.
In 2005 there were tested for TSE 12 red deer, 1 roe deer, 22 fallow deer, and 6 zoo animals (3 zebus, 1 lama, 1 antelope, and 1 elk). The Enfer test was used. All rapid test results were negative.
In 2006, 52 samples were taken from wild animals for TSE-testing (47 samples/red deer, 2 samples/fallow deer, 1 sample/roe deer, 1 sample/chamois, 1 sample/elk). All the samples tested negative.
In 2007, a study on the prevalence of CWD in red deer was conducted on the basis of Commission Decision 2007/182/EC and the Rules on the systematic monitoring of contagious animal diseases and vaccination in 2007 (UL RS 140/06, 51/07). The Rules laid down the operators of the study in Slovenia, the animal target groups for sampling and the laboratory to conduct the tests. On 11 June 2007, the Compulsory Instructions on Procedures of Implementing Article 29 of the Rules on the Systematic Monitoring of Contagious Animal Diseases and Vaccination in 2007 were issued for the operators for the purposes of implementing the aforementioned Commission Decision and Rules. Additional instructions for operators, hunters in particular, were published in a hunters' professional magazine "Lovec".

In line with Commission Decision 2007/182/EC of 19 March 2007 on a survey for chronic wasting disease in cervids (OJ L 84, 24.3.2007, p. 37), Slovenia was required to sample the following groups of free-living and farmed cervids:

- shot clinical/sick wild cervids and fallen wild cervids of the species: **red deer** (*Cervus elaphus*) and **fallow deer** (*Dama dama*).

- fallen wild cervids kept in captivity (farmed cervids) of the species: **red deer** (*Cervus elaphus*), **roe deer** (*Capreolus capreolus*) and **fallow deer** (*Dama dama*).

- road injured wild cervids of the species: **red deer** (*Cervus elaphus*), **roe deer** (*Capreolus capreolus*) and **fallow deer** (*Dama dama*).

In 2007 as well, the study included samples taken from a certain number of free-living healthy shot cervids, of the species **red deer** (*Cervus elaphus*) originating from areas where cases of scrapie in small ruminants had been detected.
In case of fallen, shot or culled free-living red deer the sampling was carried out by the hunting associations on the basis of an agreement made with VARS. The cost of sampling of EUR 25 was disbursed to every hunting association for every sample delivered (that had been appropriately taken and adequate for analysis).
Fallen and road injured farmed cervids, and road injured wild cervids were sampled by the National Veterinary Institute (NVI), which is also licensed for the removal of dead animal carcasses. Testing was conducted by the National Reference Laboratory for TSEs of the NVI (National veterinary institute), by the Rapid ENFER Test (103x) or Prionics –Check Western Test (6x).

In 2007, a total of 109 samples taken from cervids were tested in Slovenia. Number of samples per target groups is presented in the Tables hereinabove. As to species, there were 28 red deer, 78 roe deer, 1 fallow deer, and 2 reindeer subjected to tests. All the test results were negative.

Table 5: Tests for TSEs in other animal species

	Fallow deer	Roe deer	Red deer	Ibex/ **chamois,**	Zoo	Buffalo /elk	**Total**
2002	2	1	9				**12**
2003	4	25	21				**50**
2004	4	1		2	2	4	**13**
2005	22	1	12		6		**41**
2006	2	1	47	1		1	**52**
2007	1	78	28			2	**109**
Total	35	107	117	3	8	7	277

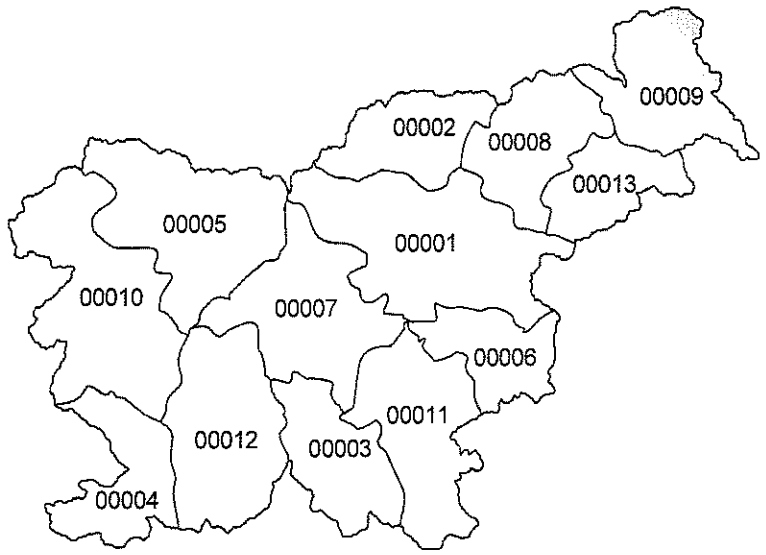
4. Measures included in the programme

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

Implementation of programme will be controlled by VARS through the Regional Offices of VARS that are competent for each relevant area.

4.2. Description and delimitation of the geographical and administrative areas in which the programme is to be applied:

Programme shall be implemented in the entire territory of the Republic of Slovenia, i.e. an area of 20,000 square kilometres, which is divided into 10 Regional Offices for the needs of operations of veterinary services. 3 VARS Regional Offices include branch offices. The Ljubljana Regional Office (RO) has a branch office (BO) in Kočevje, the Maribor RO has a branch office in Dravograd, and the Novo mesto RO has a branch office in Krško.



1. RO Celje
2. BO Dravograd
3. BO Kočevje
4. RO Koper
5. RO Kranj
6. BO Krško
7. RO Ljubljana
8. RO Maribor
9. RO Murska Sobota
10. RO Nova Gorica
11. RO Novo Mesto
12. RO Postojna
13. RO Ptuj

4.3. System in place for the registration of holdings:

It is laid down in the Veterinary Compliance Criteria Act, in Article 7 (1), that the subject of veterinary controls shall be animals, including animals in establishments under this Act, at fairs, markets, shops and other sales and assembly points, exhibitions, sports events, enclosures for wild animals, herding and other public places where animals are deliberately assembled, and holdings, fairs, collection centres, assembly centres, pet animal shops, at transporters, dealers and in facilities, including installations and equipment intended for rearing and transporting animals, and in Article 7 (5), that detailed conditions and the procedure of entry in the records, approval and registration are laid down by Community rules, or prescribed by the minister, unless specifically provided otherwise by Community rules.
The KMG-MID is an identification number of a holding, defining its location. It is granted to each holding upon its entry in the register of agricultural holdings.

4.4. System in place for the identification of animals:

1. THE SYSTEM OF IDENTIFICATION AND REGISTRATION OF BOVINE ANIMALS

The system of identification and registration of bovine animals in Slovenia was launched in January 2001. The organizational infrastructure was defined, information infrastructure was set up, persons involved were appropriately trained, and funding was defined.

A list of animal owners and holdings was set up on the basis of the general agriculture census (SORS, June 2000), and a list of premium applicants in 2000. Each holding is assigned a unique identification number and linked to the Register of Spatial Units, which includes geographical coordinates (X, Y). Each animal owner is linked to either the Central Population Register (natural person) or the Central Register of Legal Persons (legal person).

The Central Register of Bovine Animals (CRBA) is set up as a single central database, managed at the Ministry of Agriculture, Forestry and Food. Access to the database is either interactive – via the web-based user interface and the public Internet connections, or in batch – via the XML exchange data format and the public Internet connections. The list of qualified users is stored in the database along with information on the access rights. The database itself is interlinked with several other databases in the public sector.

Animals must be tagged with double plastic yellow eartags before they are 20 days old. Eartags and replacement eartags are ordered via the central identification and registration software. All orders are controlled.

Each animal owner shall maintain an on-farm register and enter all events in seven days. The register is either in paper form (mostly using the pre-printed register provided by the MAFF) or in computerized form. Animal owner registers events (newborn animals, animals from EU Member States or imported from third countries, on-movements, off-movements), either by completing a suitable form and submitting it to the local veterinary station or an agricultural centre, or by entering the data directly into the central database.

The bovine passport is issued centrally and delivered to animal owner upon the first registration and must accompany the animal in all movements, to slaughterhouse, post-mortem facility, to a border inspection post; bovine passports of dead or exported animals shall be returned to the identification and registration service and entered into the database. Animals from the other EU Member States shall get a Slovenian passport unless they are intended for the immediate slaughter.

2. THE SYSTEM OF IDENTIFICATION AND REGISTRATION OF OVINE/CAPRINE ANIMALS

The system of identification and registration of ovine and caprine animals was launched on 1 May 2005. In November 2004, 8,700 holdings keeping sheep and/or goats had been registered in the system. Data on animal owners (name, contact data, tax number and personal ID number) and on holdings (holding code, address, geographical location) are collected.

Animals must be tagged before they are six (intensive farming) or nine (extensive farming) months old and in any case before leaving the holding of birth. Breeding animals (animals with progeny or more than 1 year old) are tagged with double tags and individual ID numbers, fattening animals are tagged with single tags and holding ID numbers. Tags are delivered via the central identification and registration system.

All animal owners must keep an on-farm register. All movements, all tag losses and replacements must be entered in the register within 7 days.

A movement document has been designed to accompany animals during movements and to facilitate reports to the central database on the on- and off-farm movements.

4.5. Measures in place regarding the notification of diseases:

In accordance with paragraph 1 of Article 17 of the Veterinary Compliance Criteria Act - VCCA (UL RS 93/2005), animal keepers must immediately notify, as prescribed, the veterinary organisation in case of presence of disease or symptoms on the basis of which it may be suspected that the animal has become ill or died of a disease.

In accordance with paragraph 1 of Article 26 of VCCA, animal keepers or other natural and legal persons must communicate, as prescribed, any animal death or a dead animal carcass to an organisation carrying out the veterinary hygiene service (VHS) as public service in accordance with the regulations governing veterinary activities, and submit the dead animal carcass to that service. Prior to submission, animal keepers must handle dead animal carcasses as prescribed.

On the basis of the *Rules on animal diseases* (UL RS 81/2007), and in accordance with Contingancy plan for BSE TSEs are compulsorily notifiable diseases. In case of suspected presence of the disease, the relevant veterinary organisation must immediately notify thereof the relevant Regional Office of VARS. The authorised laboratory must immediately notify the relevant Regional Office of VARS of the diagnostic investigation results. VARS must immediately, and no later than within 24 hours, notify of the disease the International Office of Epizootic Diseases – OIE, the European

Commission, and the competent veterinary authorities of all the neighbouring countries. Notification shall include all the information required, and it shall be faxed or mailed or forwarded via the ADNS and WAHIS system.

4.6. Monitoring

4.6.1. Monitoring in Bovine Animals

	Estimated Number of tests
Animals referred to in Annex III, Chapter A, Part I, points 2.1, and point 3 . to Regulation (EC) 999/2001	**10.000**
Animals referred to in Annex III, Chapter A, Part I, points 2.2, of Regulation (EC) 999/2001	**23.000**
Others (specify)	

4.6.2. Monitoring in Ovine animals

	Estimated Number of tests
Ovine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) 999/2001	**0**
Ovine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) 999/2001	**2300**
Ovine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) 999/2001	**100**
Ovine animals referred to in Annex VII, points .3.4 (d) of Regulation (EC) 999/2001	**50**
Others (specify)	

4.6.3. Monitoring in Caprine animals

	Estimated Number of tests
Caprine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) 999/2001	
Caprine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) 999/2001	**400**
Caprine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) 999/2001	**10**
Caprine animals referred to in Annex VII, points 3.3 (c) of Regulation (EC) 999/2001	**10**
Others (specify)	

4.6.4. Discriminatory tests

	Estimated number of tests
Primary molecular testing referred to in Annex X, Chapter C, point 3.2 (c) (i) of Regulation (EC) 999/2001	**10**

4.6.5. Genotyping of positive and randomly selected animals

	Estimated number of tests
Animals referred to in Annex III, Chapter A, Part II, point 8.1 of Regulation (EC) 999/2001	**10**
Animals referred to in Annex III, Chapter A, Part II, point 8.2 of Regulation (EC) 999/2001	**100**

4.7. Eradication

4.7.1. Measures following confirmation of a BSE case:

4.7.1.1. Description:

BSE is officially confirmed where, after suspicion, the presence of disease is confirmed by the NRL on the basis of a histopathology, immunohistochemistry or another diagnostic method prescribed for the confirmation of BSE.

In case that the NRL confirms the presence of disease by the histopathology and immunohistochemistry, the results must immediately be officially communicated to the Chief Veterinary Officer of VARS by fax, upon a prior oral notification by phone.

Measures taken at the holding

On the official confirmation of the presence of BSE in the holding, the official veterinarian shall institute at the holding of the sick animal, by issuing an appropriate decision, the measures (in addition to the measures to be carried out on suspicion of BSE) to be taken in accordance with Article 13 and Annex VII to the Regulation (EC) No 999/2001:

- Requiring the complete and harmless disposal of all the parts of the carcass of infected animal, excluding the materials required for the additional tests;
- Carrying out the epizootiological investigation so as to identify the animals at risk;
- Requiring the official surveillance of the holding of the BSE-infected animal until the epizootiological investigation has been carried out: all movements of animals susceptible to BSE, and products of animal origin obtained from such animals from and to the holding must be approved by the official veterinarian so as to ensure the direct traceability and identification of relevant animals and products of animal origin;
- Animal keeper shall be entitled to a compensation for the animals destroyed or products harmlessly disposed of within the implementation of measures for the prevention, suppression and eradication of BSE.

On the basis of epizootiological investigation (on a checklist prepared in advance), the official veterinarian must identify:

- All other ruminants on the holding of the animal in which the disease was confirmed ;
- Where the disease has been confirmed in a female animal, its last progeny born within two years prior to, or after, the first clinical signs of onset of the disease in the mother;
- All animals from the cohort of the animal in which the disease has been confirmed;
- A possible source of the disease;

- Other animals at the holding of the sick animal or at other holdings, which may have been infected by the BSE-agent or may have been exposed to the same feed or source of contamination;

- The movement of potentially contaminated feedingstuffs, other material or any other means of transmission, which may have transmitted the BSE agent to or from the holding in question.

In case of confirmed presence of BSE in bovine animals, all the bovine animals identified in the second and third indents of the above epizootiological investigation and belonging to the group of animals at risk shall be killed and harmlessly disposed of.
Where the official veterinarian has established that the animals from the cohort or the progeny of the affected animal do not live in the same holding as the affected animal, he must visit all the holdings, where such animals are kept according to the data obtained, and check the identity of these animals. By issuing an appropriate decision, the official veterinarian shall ban all the movements from the holding of the animals from the cohort and of the progeny.
Where these holdings are situated within the territory of another Regional Office of VARS, the official veterinarian must immediately notify the Director of the relevant RO of the addresses of holdings situated within that particular RO, notifying thereof also the NDCC. Director of the relevant RO shall appoint an official veterinarian to immediately visit the relevant holdings, and issue a decision banning/restricting the movements of such animals.

In accordance with Article 13 and Annex VII to the Regulation (EC) No 999/2001, the progeny and cohort of the affected animal must be killed (euthanized) and subjected to BSE-tests, using the prescribed investigation methods. The official veterinarian shall agree on carrying out the euthanasia with a veterinarian of a veterinary organisation, and at the same time, he shall agree with the VHS service on the immediate removal of dead animal carcasses to the NVI section unit. There, the heads shall be removed from the carcasses and immediately delivered to the LPTSE (Laboratory of Pathology and TSEs) section room for further investigations, as the samples must be as fresh as possible. Submission of samples to the LPTSE must be notified in advance. The time of killing the animals shall be carefully planned so that the heads can be submitted to the LPTSE within its regular working hours and on a prior notification (preferably in the beginning of the week). If the cohort includes a major number of animals, the official veterinarian must plan euthanasia in agreement with the Laboratory so as to provide for the appropriate and timely taking of samples and transport thereof for diagnostic investigations.

Measures taken at the slaughterhouse

Measures at the slaughterhouse shall be taken already on the basis of a positive rapid test.
All parts of the body of an animal tested for BSE including the hide shall be retained under official control until a negative result of the rapid test has been obtained, unless they are disposed of in accordance with Article 4(2)(a) and (b) of Regulation (EC) No 1774/2002 of the European Parliament and of the Council
All parts of the body of an animal found positive or inconclusive in the rapid test including the hide shall be disposed of in accordance with Article 4(2)(a) and (b) of Regulation (EC) No 1774/2002. The head of suspect animal shall be submitted to the NRL for further investigations.
Where an animal slaughtered for human consumption is found positive or inconclusive to the rapid test, at least the carcass immediately preceding and the two carcasses immediately following the tested positive or inconclusive animal on the same slaughter line shall be

destroyed in accordance with Article 4(2)(a) and (b) of Regulation (EC) No 1774/2002, Slovenia avail derogation to destroy the aforementioned carcasses only if the result of the rapid test is confirmed to be positive or inconclusive by confirmatory examinations referred to in Annex X, Chapter C, point 3.1(b)

4.7.1.2. Summary table

	Estimated number
Animals to be killed under the requirements of Annex VII, Point 2.1. of Regulation (EC) 999/2001:	**20**

4.7.2. Measures following confirmation of a Scrapie case:

4.7.2.1. Description:

If a case of TSE in sheep and goats is confirmed by laboratory testing, the restrictions shall be maintained and the Main Office of VARS consulted regarding further action. As first measure all animals in the flock must be identified individually. Further investigations, such as genotyping and killing and complete destruction of all succeptible animals (partial depopulation) in accordance with Annex VII, Chapter A 2.3. b (ii) and 2.3.f to the Regulation (EC) No 999/2001, must be carried out. An intensive epidemiological investigation must be carried out around the positive case. Any restocking of farms shall be carried out in accordance with the Regulation (EC) No 999/2001.

National Reference Laboratory carries out further diagnoses of all the TSE-positive cases. They carry out the discriminatory tests so as to rule out BSE. In case of BSE or BSE-like results in sheep, the entire flock would be killed and harmlessly disposed of. Until now, the final diagnosis of all the discriminatory tests was – SCRAPIE (classical scrapie).

Derogations which may be decided on by a Member State in accordance with Annex VII to the Regulation (EC) No 999/2001:
At eradication in flocks we are making use of derogation referred to in point 2.3.f of Annex VII, where due to a low frequency of the ARR allele in certain flocks we are carrying out eradication within a 5-year period.
We have approved of movements for slaughter of lambs aged up to 3 months in accordance with point 2.3. b (ii) of Annex VII to the Regulation (EC) No 999/2001.

In two cases, scrapie was detected in two purebred breeding rams. Both rams were born in a holding, where the second scrapie case had been confirmed. As the male animals do not play an important role in scrapie transmission, we do not carry out eradication measures according to Annex VII to the Regulation (EC) No 999/2001 in these holdings, as the eradication measures have already been carried out in the holdings of origin of these two rams (derogation from point 2.2. of Annex VII).

4.7.2.2. Summary table

	Estimated number
Animals to be killed under the requirements of Annex VII, Point 2.3 of Regulation (EC) 999/2001:	**200**
Animals to be genotyped under the requirements of Annex VII, Point 2 . 3. of Regulation (EC) 999/2001:	**400**

4.7.3. Breeding programme for resistance to TSE s in sheep:

4.7.3.1. General description[2]:

Of 89,667 breeding sheep in total there have been included 15,000 purebred breeding sheep in the breeding programme. Breeding programme of TSE-selection includes the sheep of controlled flocks of the following breeds:

- Jezersko-Solčavska breed,
- Istrian pramenka breed,
- Bovška breed,
- Belokrajnska pramenka breed,
- Improved Jezersko-Solčavska breed.

Genotyping within the scope of the breeding programmes of Slovenian autochthonous breeds is conducted with the objective of determining the genetic resistance of ovine animals against TSEs. Objectives of the programme include the increase of the ARR allele frequency in ovine flocks and thereby the increased resistance against TSEs and, at the same time, a decreased frequency of the alleles whose susceptibility to TSEs has been proven. Thus, animals with TSE-non-resistant genotypes are culled.
In 2006, all the breeding programmes for the Slovenian autochthonous breeds were supplemented on the basis of Commission Decision 2003/100/EC, and operations by the end of 2010 in the Republic of Slovenia were established. This decision was adopted by breeders, included in the breeding programme, in 2006, and a Decision by MAFF, No. 33205-86/2006-5, was issued on 22. 8. 2007.

Every year, VARS requires the genotyping to be conducted in accordance with the breeding programme and based on the **Rules on the systematic monitoring of animal diseases and vaccination**. Every year, beginning in 2005, the breeders and/or breeding organisations submit to VARS Main Office a list of animals to be genotyped in accordance with the basic breeding programme. The list is accessible via the VOLOS computer application. All the test results are entered in the database which is managed centrally for the entire sphere of animal selection at the Biotechnical Faculty situated in Rodica. Breeders have direct access to all these data, including the TSE-testing results. In addition, the NVI sends to the relevant breeders all the genotyping results.

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[2] Description of the programme according to the minimum requirements laid down by Annex VII, Chapter B, to Regulation (EC) No 999/2001

Every VARS Regional Office has direct access (via password) to the Biotechnical Faculty database (http://www.bfro.uni-lj.si/pls/oratest/drob_misc.vstop), where they may access the data on genotyping conducted and/or check the current situation at any relevant breeding holding.

Selection roadmap:

1.As of 2005, testing stations for rams have not been selling the NSP 4 and NSP 5 rams for mating purposes anymore.

2.As of 1. 1. 2008, the NSP 1 and NSP 2 rams only may be sold by the testing stations for the purposes of introduction into the genotype-controlled flocks.

3.As of 1.1. 2010, the NSP 1 rams only will be able to be sold by the testing stations for the purposes of introduction into the genotype-controlled flocks.

4.By the end of 2010, all the NSP 2-genotype rams will be culled from the genotype-controlled flocks.

5.The NSP 3 genotype, and also the NSP 2 and NSP 1 genotypes, may be sold for the purpose of introduction into the commercial flocks, in case that such genotypes are available on the market.

6.In cases where, on account of low frequency of the NSP 1 and NSP 2 genotypes, difficulties would arise in supplying the genotype-controlled flocks with the appropriate rams, the breeding organisation will decide on any possible deviations from the requirements, following a consultation with the Veterinary Administration of the Republic of Slovenia and with the relevant professional service of another organisation with a recognised small-ruminant-breeding status.

A final objective of the TSE-selection programme is to obtain in all the genotype-controlled flocks a status, where all the rams will have the ARR/ARR-allele (homozygote), and all the breeding ewes in the flocks will have the ARR/ARR-allele or be of the genotype, complying with the NSP 2 (ARR/ARQ, ARR/AHQ, ARR/ARH). As envisaged, this objective could be attained within a 10-year period, i.e. by 2015, and some flocks will have reached a phase, where all the animals will have the ARR/ARR-allele / homozygote (Phase I).

Flocks included in the selection programme shall be allotted the following statuses / phases by the breeding organisation:

- **Phase I status:** Flocks with all the animals of the ARR/ARR genotype. This status is equal to the "Level I" status from Annex 2 to Commission Decision 2003/100/EC.

- **Phase II status**: Flocks with all the male breeding animals of the ARR/ARR genotype, and with the female breeding animals complying at least with the Phase III requirements. This status is equal to the "Level II" status from Annex 2 to Commission Decision 2003/100/EC. Such status in the genotype-controlled flocks is envisaged to be reached by the end of 2010.

- **Phase III status**: Flocks with all the animals tested, or descendants of tested animals. No tested animal shall have the VRQ-allele, and in case of non-tested animals, there shall be no possibility of the VRQ/- - genotype; descendants of such animals may therefore be of the NSP 1, NSP2 or NSP 3 genotypes. This status is internal in nature

and is not laid down in Commission Decision 2003/100/EC. Such status is envisaged to be reached in the genotype-controlled flocks in 2008.

Breeding animals introduced into a flock with a certain status shall be of an equal or higher status only; animals with a lower status may be supplied in cases only, where the animal has been genotyped and complied with the conditions for introduction. Breeding holdings with a higher status have precedence in the selection of animals for testing. Herd status is granted once a year, for all the herds. It is granted by the Biotechnical Faculty on the basis of data entered in the register of genotyped animals, and of other data entered in the same database.

Genotyping is conducted within the TSE-eradication programme. Eradication in Slovenia is carried out in such a way that, in case that classical Scrapie would be confirmed in a flock, only animals of the non-resistant NSP5, NSP4 and NSP3 genotypes would be killed or culled. Preliminary genotyping of all the animals in the infected flock is prerequisite for implementation of this method.
In the period 2005 – 2007, 13194 animals were genotyped in total, among them 9939 animals were genotyped within the breeding programmes. Currently, 7,771 animals thereof are still alive, and another 6,117 live animals still need to be genotyped. All these animals are included in the genotyping programme of 2008, where 55.95 % of all the currently alive animals have been genotyped to date. As the programme was designed so that first the animals of autochthonous breeds of lower frequency were subjected to testing, by the end of 2007, there were genotyped more than 80 % of Istrian Pramenka, 75 % of Bovška breed, and more than 72 % of Belokranjska Pramenka breed. Of the more frequent breeds within selection there were genotyped 35 % of the Jezersko-Solčava breed, and only 25 % of the improved Jezersko-Solčava breed.
As genotyping of all the rams within testing is carried out in Logatec and in Jezersko, a high percentage of all rams tested emerges in these two breeds, i.e. 62 % in case of the Jezersko-Solčava breed, and 67 % in case of all live rams of the improved Jezersko-Solčava breed. As envisaged, the genotyping of most animals of these two breeds will be concluded in 2008. A high percentage of tested male animals enables a relatively rapid progress, in particular in decreasing the presence of (culling) the VRQ-allele or the NSP 4 and 5 genotypes.

Summary table of genotyping carried out in 2005

Target group /	Ewes genotyped under the framework of a breeding programme as established in Commission Decision 2003/100/EC	Rams e genotyped under the framework of a breeding programme as established in Commission Decision 2003/100/EC	Animals genotyped under the requirements of Annex VII, Point 2 (b) of Regulation (EC) 999/2001	Genotyping - animals referred to in Annex III, Chapter A, Part II, point 7.1 of Regulation (EC) 999/2001	Genotyping - animals referred to in Annex III, Chapter A, Part II, point 7.2 of Regulation (EC) 999/20011
NSP 1		5	40		19
NSP 2		118	252		115
NSP3		257	583	12	243
NSP4		3	96		7
NSP5		20	297	89	21
N of tests	**0**	**403**	**1268**	**101**	**405**

Summary table of genotyping carried out in 2006

Target group /	Ewes genotyped under the framework of a breeding programme as established in Commission Decision 2003/100/EC	Rams e genotyped under the framework of a breeding programme as established in Commission Decision 2003/100/EC	Animals genotyped under the requirements of Annex VII, Point 2 (b) of Regulation (EC) 999/2001	Genotyping - animals referred to in Annex III, Chapter A, Part II, point 8.1 of Regulation (EC) 999/2001	Genotyping - animals referred to in Annex III, Chapter A, Part II, point 8.2 of Regulation (EC) 999/20011
NSP 1	189	21	112		28
NSP 2	1110	137	388	1	112
NSP3	2222	295	221	44	178
NSP4	41	4	10		8
NSP5	183	21	17	92	22
N of tests	**3745**	**478**	**748**	**137**	**348**

Summary table of genotyping carried out in 2007

Category / Group	Breeding programme Ewes	Breeding programme Rams	Eradication	Monitoring 8.1.	Monitoring 8.2.	Total
NSP1	202	54	51	0	0	307
NSP2	1322	300	128	0	9	1759
NSP3	2779	378	23	8	20	3208
NSP4	51	4	3	0	1	59
NSP5	200	23	1	4	0	228
Total	***4554***	***759***	***206***	***12***	***30***	**5561**

In 2007, a total of 5,561 genotyping tests were conducted, whereof 5,313 within breeding programmes, 206 within scrapie eradication, and 42 within monitoring. In 2007, the monitoring, as referred to in point 8.2. of Chapter A of Annex III to the Regulation (EC) No 999/2001, did not reach up to the envisaged 100 tests; however, the monitoring of 2006 was much more extensive than envisaged (348 tests).

In 2006, all the rams in test stations and all the rams in control flocks, which have not been genotyped yet, should be tested. If the plan is successfully completed, the genotypes will be known of all the animals of the Bovska breed, Belokrajnska pramenka breed and Istrian pramenka breed, and of the animals of the JS and JSR breeds, the progeny of which are most frequent sires and have a great impact on the genotype in the entire population. All the rams of the VRQ allele are immediately culled, and with ewes there applies the principle that from the ewes with an VRQ allele no lambs are selected for breeding and that ewes with an VRQ allele may be moved to the slaughterhouse for slaughter only.

A proposal to carry out sheep genotyping in 2008 within the Slovenian selection programme has been prepared for all the Slovenian breeds, taking into account the genotyping to be carried out in 2007, as envisaged. The number of tests envisaged to be carried out in 2008 amounts to 6.000. It has been envisaged within the programme of 2008 that all the purebred breeding animals in individual holdings would be tested, and thereafter, only animals free of

the VRQ allele would be bred. As planned, genotyping will be carried out in 2008 on all the purebred breeding animals, which have not been genotyped yet, of the Bovska breed, Belokrajnska pramenka breed and Istrian pramenka breed. These breeds include in particular young animals which have only been entering the reproduction stage and belong to breeders, where most animals have already been genotyped. Genotyping is planned also for all animals of the improved Bovska breed, as these animals could be introduced into the Bovska breed and cause an uncontrolled introduction of undesirable alleles into the Bovska breed population.

4.7.3.2. Summary table

	Estimated number
Ewes to be genotyped under the framework of a breeding programme as established in Article 6a of regulation (EC) No 999/2001	**2500**
Rams to be genotyped under the framework of a breeding programme as established in Article 6a of regulation (EC) No 999/2001	**500**

5. Costs

5.1. Detailed analysis of the costs:

5.2. Summary of the costs

Costs related to	*Specification*	*Number of units*	*Unitary cost in €*	*Total amount in €*	*Community funding requested (yes/no)*
1. **BSE testing**					
1.1. Rapid tests	Test: Enfer TSE	*30.000*	*25,76*	*772.800,00*	*YES*
	Test: Prionics Check Western	*3.000*	*25,76*	*77.280,00*	*YES*
2. TSE/Scrapie testing					
2.1. Rapid tests	Test: Enfer TSE	*2.870*	*25,76*	*73.931,20*	*YES*
	Test: Idexx		*25,76*		*YES*
	Test: Prionics Check Western - SR		*25,76*		*YES*
3. Discriminatory testing					
3.1.Primary molecular tests	Test: VLA Hybrid WB	*10*	*148,04*	*1.480,40*	*YES*

4. Genotyping					
4.1. Determination of genotype of animals in the framework of the monitoring and eradication measures laid down by Regulation (EC) No 999/2001	Method: single nucleotide polymorphism detection SNP (136, 154, 171) in the case of undefined results - sequencing	***400***	***14,10***	***5.640,00***	***YES***
	Method: single nucleotide polymorphism detection SNP (136, 154, 171,**141**) in the case of undefined results - sequencing	***110***	***18.80***	***2.068,00***	***yes***
4.2. Determination of genotype of animals in the framework of a breeding programme	Method: single nucleotide polymorphism detection SNP (136, 154, 171) in the case of undefined results - sequencing	***3000***	***14,10***	***42.300,00***	***YES***
5. Compulsory slaughter					
5.1. Compensation for bovine animals to be killed /slaughtered under the requirements of Annex VII, Chapter A, point 2.1. of Regulation (EC) 999/2001		***20***	***1200,00***	***24.000,00***	***YES***
5.2. Compensation for ovine and caprine animals to be killed/slaughtered under the requirements of Annex VII, Chapter A, point 2.3. of Regulation (EC) 999/2001		***200***	***120,00***	***24.000,00***	***YES***
TOTAL'				***1.023. 499,60***	***YES***