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

Monitoring and eradication programme of TSE, BSE and scrapie

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

Denmark

* in accordance with Council Decision 2009/470/EC
Program for Eradication: ANNEX 3

Submission number: 1272530291535-272
Submission date: 29/04/2010 10:38:12

1. Identification of the programme

Country Geographical English Name: Denmark
Disease: Transmissible Spongiform Encephalopathies
Request period From: 2011
Request period To: 2011

1.1 Contact

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2. Description of the programme

Description of the BSE programme for bovine animals
The Danish BSE surveillance programme started with passive surveillance back in 1990 where BSE was made notifiable. The active surveillance started 1 October 2000. The programme has been altered several times due to amendments of the EU TSE legislation. From the 1. January 2009 the active Danish BSE monitoring programme consists of test for BSE of bovine animals above 48 months according to TSE regulation 999/2001 as amended and Commission Decision of 28 September 2009 authorising certain Member States to revise their annual BSE monitoring programmes.

Purpose of the programme for bovine animals
The purpose of the Danish BSE surveillance programme is to monitor the BSE status in the Danish cattle population and provide knowledge of the disease situation in Denmark. The Danish BSE programme fulfils the Regulation 999/2001 as amended and Commission Decision 2008/908. From the 1 January 2009 we have raised the age limit for test to 48 months for all categories of active BSE monitoring.

At present no timeframe is set for the duration of the programme.

Description of the TSE programme for ovine and caprine animals
TSE in sheep and goats was made notifiable in 1988, and an active Danish TSE surveillance programme was initiated 1 January 2002. The programme has later been altered several times due to amendments of the EU TSE legislation. On 1 October 2003 Denmark started testing all fallen stock of both species for TSE as an agreement following negotiations with the EU allowing Denmark to omit to start a breeding programme for TSE resistance in sheep and allowing Denmark to imply additional guarantees when importing sheep and goats from other countries. This national surveillance program guarantees that all fallen stock age 18 months or older in Denmark will be tested for TSE at the rendering plant.

At present the TSE monitoring programme in Denmark consists of all clinically suspected animals without age limit and all fallen stock above 18 months.

Furthermore a random sample of at least 100 sheep of the fallen stock animals is genotyped. The number of TSE tests of fallen stock in Denmark exceeds the minimum requirements of Regulation 999/2001 as amended. This is in accordance with the Commission Regulation 546/2006 (this is the replacement of Commission Regulation 1874/2003), which approved the national scrapie surveillance programme for Denmark.

Purpose of the programme for ovine and caprine animals
It is the purpose of the national TSE surveillance programme to monitor the TSE situation in the Danish population of sheep and goats and eradicate the positive cases and in case of classical scrapie other animals which may be infected. In case of atypical scrapie, which is not assumed to be contagious, Denmark will follow the TSE regulation concerning atypical scrapie. The overall aim of this national TSE programme is to get Denmark recognised as being free from classical scrapie. At the end of 2010 Denmark has had the monitoring of all fallen stock for 7 years and expects to fulfill the OIE demand, as the rules are today, for a country being free from classical scrapie. At present there is no timeframe for the programme.

Testing of animals for TSE for cattle, sheep and goats.
The routine TSE testing in Denmark are performed at private approved laboratories. The Danish national reference laboratory (NRL) performs all the testing of clinically suspected animals and the confirmatory testing, when a rapid test are positive or inconclusive. Beside this the NRL perform a fraction of the fallen stock animals tested to maintain routine in testing.

The tests used, the test methods and the interpretation of the test results are performed in accordance with the TSE regulation 999/2001 as amended.

The private laboratories in Denmark are approved by the Danish Veterinary and Food Administration and are under current supervision.

3. Description of the epidemiological situation of the disease

Epidemiological situation:

For bovine animal

As a result of the active surveillance for BSE in Denmark in 2009 approximately 159,000 animals were examined for BSE. The passive surveillance revealed two clinically suspected bovine animals, which were examined for BSE.

One case of BSE was discovered in 2009 in a 14 year old normal slaughter animal born in 1995 on a dairy farm in the southern part of Denmark.

In total 15 indigenous cases of BSE has been discovered in Denmark. Furthermore there have been three cases in native Danish cattle, which were exported to Portugal and Italy. These cases were diagnosed positive in June 2002 and in July 2003 in Portugal and in November 2002 in Italy. In addition an imported cow from the UK was found BSE positive in Denmark in 1992. This cow had been infected in the UK.

For ovine and caprine animals.

In 2009 Denmark examined almost 8000 TSE tests from fallen stock sheep and goats and three goats were clinically suspected for TSE of a total Danish sheep and goat population of approximately 110,000 adult ewes (including ewe lambs put to the ram) and 15,000 adult female goats. The animals are divided among approximately 8,700 sheep holdings and 3,600 goat holdings distributed over the entire country. Of those holdings approximately 6,100 sheep holdings and 3,900 goat holdings are having 10 animals or less.

In total two positive cases of TSE in small ruminants have been diagnosed in Denmark. All five cases were atypical scrapie cases. Three cases were diagnosed in 2006 and two cases were diagnosed in 2008.

All the surveillance results are submitted to the EU TSE database. Here is only attached a table which summarises the positive BSE cases.

4. Measures included in the programme

4.1 Designation of the central authority in charge of supervising and coordinating the departements responsible for implementing the programme

The Danish Veterinary and Food Administration (DVFA) carry out the programme assisted by the two

Danish Veterinary and Food Administration centres - Region West and Region East. The central coordination activities at the DVFA are placed in the Division for Animal Health. The Danish Veterinary and Food Administration is part of the Ministry of Food, Agricultures and Fisheries. The regions are responsible for inspect that the rules regarding TSE tests are fulfilled by the slaughterhouses and the rendering plants so that all TSE tests that are to be taken actually are taken. For clinically suspected animals the region are responsible and make sure that test material from the animals with clinical signs of TSE are sent to the NRL. Furthermore, the regions are responsible for the administration of official movement restrictions in connection with suspected (both clinically suspected and laboratory suspected animals) and confirmed TSE-cases. In confirmed cases the region in collaboration with the Division for Animal Health plans the killing and complete destruction of the cohort animals.

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

The TSE programmes will cover the whole of Denmark.

4.3 System in place for the registration of holdings

All Danish cattle, sheep and goat farms are registered in The Central Husbandry Register (CHR), a database owned by the Ministry of Food, Agriculture and Fisheries. The rules for registration are laid down in Order 59 of 18 January 2010 on registration of animal holdings in the CHR. Each unit is registered by a CHR number and the database covers registration of the unit e.g. address and diseases.

4.4 System in place for the identification of animals
Rules are laid down in Order No. 1121 of 1 December 2009 concerning identification, registration and movement of cattle, swine, sheep or goats. All Danish cattle, sheep and goats are ear tagged in both ears, with individual numbers in accordance with the EU-rules.
For cattle each individual animal number is registered in the CHR with information regarding day of birth, movements, offspring etc.
For sheep and goats the individual numbers are recorded in the holding register on the farm, but they are not recorded in CHR. Movements of sheep and goats are recorded in the CHR. For each batch of animals being moved the following information is recorded: The number of animals, the date, the number of the holding from which the animals are moved, the number of the holding of destination and transport id. Each movement of animals is accompanied by a movement document containing relevant information on the animals being moved.

4.5 Measures in place as regards the notification of the disease

For cattle BSE is a notifiable disease in Denmark. Any farmer or veterinarian must notify the veterinary authorities of all suspicions of BSE. The symptom of BSE and the obligation to notify the competent authorities are laid down in Order No. 1361 of 19 December 2008.
For sheep and goats TSEs are notifiable diseases in Denmark. Any farmer or veterinarian must notify the veterinary authorities of all suspicions of TSE. The symptoms of TSE and the obligation to notify the competent authorities are laid down in Order No. 930 of 7 September 2006.

### 4.6 Monitoring

#### 4.6.1 Monitoring in bovine animals

<table>
<thead>
<tr>
<th>Description</th>
<th>Nbr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals referred to in Annex III, Chapter A, Part I, point 2, 2 of Regulation (EC) No 999/2001</td>
<td>145,000</td>
</tr>
<tr>
<td>Clinically suspected animals and OT animals (animals from suspected or positive herds)</td>
<td>150</td>
</tr>
<tr>
<td><strong>Sum:</strong></td>
<td><strong>174,150</strong></td>
</tr>
</tbody>
</table>

#### 4.6.2 Monitoring in ovine animals

<table>
<thead>
<tr>
<th>Description</th>
<th>Nbr</th>
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</thead>
<tbody>
<tr>
<td>Ovine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) No 999/2001</td>
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<tr>
<td>Ovine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) No 999/2001</td>
<td>1,500</td>
</tr>
<tr>
<td>Ovine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) No 999/2001</td>
<td>200</td>
</tr>
<tr>
<td>Ovine animals referred to in Annex VII, Chapter A, point 3.4(d) of Regulation (EC) No 999/2001</td>
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</tr>
<tr>
<td>Ovine animals referred to in Annex VII, Chapter A, point 5(b)(ii) of Regulation (EC) No 999/2001</td>
<td>150</td>
</tr>
<tr>
<td>Clinically suspected animals and OT animals (animals from suspected or positive herds)</td>
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<td><strong>Sum:</strong></td>
<td><strong>1,860</strong></td>
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#### 4.6.3 Monitoring in caprine animals

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<tr>
<td>Caprine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) No 999/2001</td>
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</tr>
<tr>
<td>Caprine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) No 999/2001</td>
<td>100</td>
</tr>
<tr>
<td>Caprine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) No 999/2001</td>
<td>100</td>
</tr>
<tr>
<td>Caprine animals referred to in Annex III, Chapter A, Part II, point 3.3(c) of Regulation (EC) No 999/2001</td>
<td>0</td>
</tr>
<tr>
<td>Caprine animals referred to in Annex III, Chapter A, Part II, point 5(b)(ii) of Regulation (EC) No 999/2001</td>
<td>100</td>
</tr>
<tr>
<td>Clinically suspected animals and OT animals (animals from suspected or positive herds)</td>
<td>10</td>
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<tr>
<td><strong>Sum:</strong></td>
<td><strong>310</strong></td>
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#### 4.6.4 Discriminatory tests

<table>
<thead>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Primary molecular testing referred to in Annex X, Chapter C, point 3.2(c)(i) of Regulation (EC) No 999/2001</td>
<td>5</td>
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</table>
### 4.6.4 Discriminatory tests

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
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<tr>
<td></td>
<td></td>
</tr>
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<td>Sum:</td>
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</tr>
</tbody>
</table>

### 4.6.5 Genotyping of positive and randomly selected animals

<table>
<thead>
<tr>
<th>Description</th>
<th>Nbr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals referred to in Annex III, Chapter A, Part II, point 8.2 of Regulation (EC) No 999/2001</td>
<td>100</td>
</tr>
<tr>
<td>Sum:</td>
<td>105</td>
</tr>
</tbody>
</table>

### 4.7 Eradication

#### 4.7.1 Measures following confirmation of a BSE case

##### 4.7.1.1 Description

BSE in bovine animals
Whenever a suspicion of BSE arises all animals in the herd is placed under official movement restriction until the cohort is defined. Then only animals belonging to the cohort and offspring born within two years prior to, or after clinical onset of the disease are placed under movement restrictions until the examinations of the suspected animal are finished with a negative result.

BSE case
When a case is confirmed all animals belonging to the cohort according to TSE regulation 999/2001 as later amended and the offspring born within two years prior to, or after clinical onset of the disease are culled. Of the culled animals all animals above 24 months of age are tested for BSE and the animals are finally destroyed as SRM at a category 1-rendering plant.

Denmark has in our legal framework the possibility to use an extended version of the EU cohort depending upon when it is most likely that the animal has been infected.

The Danish Veterinary and Food Administration will notify the Commission, the other Member States and the OIE of every positive case of BSE in accordance with the current EU rules.

##### 4.7.1.2 Summary table

<table>
<thead>
<tr>
<th>Description</th>
<th>Nbr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals to be killed under the requirements of Annex VII, Chapter A, point 2.1 of Regulation (EC) No 999/2001</td>
<td>150</td>
</tr>
<tr>
<td>Sum:</td>
<td>150</td>
</tr>
</tbody>
</table>

### 4.7.2 Measures following confirmation of a scrapie case

#### 4.7.2.1 Description
4.7.2 Measures following confirmation of a scrapie case

4.7.2.1 Description

TSE in ovine and caprine animals.
When an animal is suspected of TSE, sheep and goats and ovine/caprine embryos, ova and semen are placed under official movement restrictions according to Regulation 999/2001 as amended and Order No. 930 of 7. September 2006, until all examinations of the suspected animal are finished with a negative result.

BSE in ovine or caprine animals
The situation will be treated in accordance with Regulation 999/2001 as amended.

Classical scrapie case
In case of a positive test result of classical scrapie the animals under official movement restrictions will be culled and destroyed as SPRP at a category1-rendering plant. The positive animal will be genotyped. Like the culling and genotyping the buildings, manure and grazing land will be treated in accordance with Regulation 999/2001 as amended.

Atypical scrapie
In case of a positive test result of atypical scrapie in a sheep, measures according to TSE regulation 999/2001 Annex VII Chapter A point 5 b) will be applied. The measures will place for a two breeding year period all animals in the affected holding under official movement restrictions with intensified monitoring and testing of all ovine and caprine animals aged over 18 months slaughtered for human consumption and all animals which have been killed/or are dead in the holding. Furthermore measures will be applied to secure that no live ovine and caprine, embryos or ova from the holding will be dispatched to other countries during a period of three years. Exceptions are animals of the ARR/ARR genotype, in which case the period of export restriction is two breeding years.

The Danish Veterinary and Food Administration will notify the Commission, the other Member States and the OIE of every positive case of TSE in ovine and caprine animals in accordance with the current EU rules.

4.7.2.2 Summary table

<table>
<thead>
<tr>
<th>Description</th>
<th>Nbr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals to be genotyped under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001</td>
<td>250</td>
</tr>
<tr>
<td>Animals to be killed under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001</td>
<td>500</td>
</tr>
<tr>
<td><strong>Sum:</strong></td>
<td><strong>750</strong></td>
</tr>
</tbody>
</table>

4.7.3 Breeding programme for resistance to TSEs in sheep

4.7.3.1 General description
Denmark has no breeding programme for TSE in sheep since the programme according to Article 6a of Regulation (EC) No 999/2001 isn't obligatory. Denmark has never had a breeding programme since the Danish national TSE surveillance programme was approved the 24 October 2003 with Commission Regulation No. 1874/2003 (later replaced by S46/2006). This surveillance programme granted Denmark the derogation from the obligation to establish breeding programmes for TSE reistance in sheep and defined additional guarantees concerning import.

4.7.3.2 Summary table

<table>
<thead>
<tr>
<th>Description</th>
<th>Nbr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ewes to be genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC)</td>
<td>0</td>
</tr>
<tr>
<td>Rams to be genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sum:</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

5. Costs

5.1 Detailed analysis of the costs
5. Costs

5.1 Detailed analysis of the costs

According to the final technical and financial report for the TSE test programme for 2008 and 2009 there have been submitted the following unitary costs to the Commission. The unitary cost is expected to be at the same level in 2011.

1. BSE testing - the unitary cost for one rapid test: 15 EUR
2. Scrapie testing - the unitary cost for one rapid test: 16 EUR
3. Discriminatory testing - the unitary cost for one AFSSA Western Blot test: 176 EUR
4. 1 Genotyping – the unitary cost for one genotyping: 44 EUR
5. 1 Compulsory slaughter – the unitary cost for one bovine animal: 450 EUR
5. 2 Compulsory slaughter – the unitary cost for one ovine or caprine animal: 250 EUR

5.2 Summary of costs

<table>
<thead>
<tr>
<th>Costs related to</th>
<th>Specification</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Community funding requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid tests</td>
<td>IDEXX HerdCheck and Prionics Check PrioStrip</td>
<td>174,150</td>
<td>15</td>
<td>2,612,250</td>
<td>yes</td>
</tr>
<tr>
<td>Rapid tests</td>
<td>IDEXX HerdCheck</td>
<td>2,170</td>
<td>16</td>
<td>34,720</td>
<td>yes</td>
</tr>
<tr>
<td>Primary molecular tests</td>
<td>AFSSA Western Blot</td>
<td>5</td>
<td>176</td>
<td>880</td>
<td>yes</td>
</tr>
<tr>
<td>4. 1 Determination of genotype of animals in the framework of the monitoring and eradication measures laid down by Regulation (EC) No 999/2001</td>
<td>Genotyping</td>
<td>350</td>
<td>44</td>
<td>15,400</td>
<td>yes</td>
</tr>
<tr>
<td>4. 2 Determination of genotype of animals in the framework of a breeding programme</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>no</td>
</tr>
<tr>
<td>5. 1 Compensation for bovine animals to be killed /slaughtered under the requirements of Annex VII, Chapter A, point 2.1 of Regulation (EC) No 999/2001</td>
<td>BSE eradication</td>
<td>150</td>
<td>450</td>
<td>67,500</td>
<td>yes</td>
</tr>
<tr>
<td>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) No 999/2001</td>
<td>Scrapie eradication</td>
<td>500</td>
<td>250</td>
<td>125,000</td>
<td>yes</td>
</tr>
</tbody>
</table>

Sum: 177,325  2,855,750

Sum: 177,325  Sum: 2,855,750