Eradication and monitoring programme for Bluetongue

Finland

Approved* for 2014 by Commission Decision 2013/722/EU

* in accordance with Council Decision 2009/470/EC
PROGRAMME for ERADICATION:
ANNEX I

Member States seeking a financial contribution from the Union for national programmes for the eradication, control and monitoring of animal diseases and zoonosis listed below, shall submit applications containing at least the information set out in this form.

Bovine brucellosis, bovine tuberculosis, ovine and caprine brucellosis (B. melitensis), bluetongue in endemic or high risk areas, african swine fever, swine vesicular disease, classical swine fever, rabies.

Instructions to complete the form:

1) In order to fill in and submit this form you must have at least the ADOBE version Acrobat Reader 8.1.3 (example : 8.1.3, 8.1.4, 8.1.7, 9.1, 9.2,...), otherwise you will not be able to use the form.

Your version of Acrobat Reader is: 11.002

2) Please provide as much information as possible. If you have no data for some fields then put the text "NA" (Not applicable) in this field or 0 if it is a numeric field. If you need clarifications on some of the information requested, then please contact SANCO-BO@ec.europa.eu.

3) To verify your data entry while filling your form, you can use the "verify form" button at the top of each page. If the form is not properly and completely filled in, an alert box will appear indicating the number of incorrect fields. Please use the "verify form" button until all fields are correctly filled in. It is mandatory to fill in the box about Animal populations to make the rest of the questions visible. If you still have any difficulties, please contact SANCO-BO@ec.europa.eu.

4) When you have finished filling the form, verify that your internet connection is active and then click on the "submit notification" button below. If the form is properly filled in, the notification will be submitted to the server and a submission number + submission date will appear in the corresponding field.

5) IMPORTANT: Regularly save the pdf when you fill it out. After you have received the Submission number, DO NOT FORGET TO SAVE THE PDF ON YOUR COMPUTER FOR YOUR RECORDS!

Monday, April 29, 2013 15:12:01

1367237527603-2224
1. **Identification of the programme**

*Member state*: SUOMI / FINLAND

*Disease*: Bluetongue in endemic or high risk areas

*Species*: Bovines and sheep and goats

*This program is multi annual*: no

*Request of Community co-financing for year*: 2014
1.1 Contact

Name: Katri Levonen

Phone: +358407233887

Fax: +358916053338

Email: katri.levonen@mmm.fi

2. Historical data on the epidemiological evolution of the disease

Provide a concise description on the target population (species, number of herds and animals present and under the programme), the main measures (sampling and testing regimes, eradication measures applied, qualification of herds and animals, vaccination schemes) and the main results (incidents, 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 (point 6), complemented by graphs or maps (to be attached).

(max. 32000 chars):

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

3. Description of the submitted programme

Provide a concise description of the programme with its main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence), the main measures (sampling and testing regimes, eradication measures to be applied, qualification of herds and animals, vaccination schemes), the target animal population, the area(s) of implementation and the definition of a positive case.

(max. 32000 chars):

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

In the enforced surveillance program bulk milk samples from every dairy herd are analysed year: in November. Blood samples from beef cattle from the whole country are analysed once a year.

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

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

All other samples but imported animals are tested serologically by ELISA. In case of positive serology, samples for detecting the BT virus (by PCR) are taken. Case definition used in Finland is in line with the definition in the Commission Regulation 1266/2007. Due to import of vaccinated animals antibody testing alone may not be sufficient to diagnose BTV infection in the herd, thus PCR is used for virus detection. Of course, if earlier negative test results are available seroconversion can also be used to confirm the BTV positive case. Clinical signs are not pathognomic for BTV, thus, in the areas, which are free of BTV, the diagnosis cannot be made by clinical signs alone. PCR is available for virus detection and PCR positive sample can be further typed for specific BTV serotype.

Vaccination plan covers the coastal area where BT is most probable to enter the country. Vaccination will only take place after there has been bluetongue cases in Finland. Vaccination plan is not submitted with this application but it does exist in Finland if needed.

4. **Measures of the submitted programme**

4.1 **Summary of measures under the programme**

*Duration of the programme: 2014*

**First year:**

☐ Control
☒ Testing
☐ Slaughter and animals tested positive
☐ Killing of animals tested positive
☐ Vaccination
4.2 Organisation, supervision and role of all stakeholders involved in the programme

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.

(max. 32000 chars):

The authorities in charge of supervising and coordinating the implementation of the programme are: Ministry of Agriculture and Forestry, Finnish Food Safety Authority Evira, Regional State Administrative Agencies and local official veterinarians.

Ministry is in charge of reporting the programmes into the European Commission. The design of the programme, the laboratory tests and the sampling at slaughterhouses are done by Evira. Regional State Administrative Agencies coordinate the activities in their area and give orders to the local veterinarians. Local official veterinarians and slaughterhouse inspector veterinarians of Evira eventually take the samples.
4.3 Description and demarcation of the geographical and administrative areas in which the programme is to be implemented

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.

(max. 32000 chars):

Enforced surveillance (Area A) coastal area in the south: Ahvenanmaa, Varsinais-Suomi, Uusimaa and parts of Satakunta, Häme, Kymenlaakso, Kaakkoissuomi.
Basic surveillance (Area B), the rest of Finland except the most northern part of the country: Pohjanmaa, Etelä-Pohjanmaa, Keski-Suomi, Pirkanmaa, Pohjois-Savo, Etelä-Savo, Pohjois-Karjala and parts of Pohjois-Pohjanmaa, Satakunta, Häme, Kaakkoissuomi.

Area of enforced surveillance area A (high risk area) and former basic surveillance area B area (low risk area) are depicted in the map (attachment). Estimated surface area of Area A is about 28 935 km² and Area B about 151 366 km². At the time the programme was set up, the basis of the surveillance area was not on administrative area (lääni/län) but temperature zones in Finland. Also highest risk for spread of BTV-carrying midges was considered coming from south-west. Therefore, the intensified surveillance area A was set to cover the coastal areas of Southern Finland. Area most in risk for introduction of BTV was considered being the most south-western archipelago area (island of Area A1 in the map). Therefore also sheep and goat herds from the Åland archipelago have been included in the program. There are about 1000 dairy herds, 240 suckler cow herds on area A. There are some 60 sheep and/or goat herds on the Åland Archipelago.

Epidemiological criteria for the classification of areas A, B and C

Area of enforced BT surveillance area A (high risk area) and former basic surveillance area B area (low risk area) are depicted in the map. Estimated surface area of Area A is about 28 935 km² and Area B about 151 366 km². At the time the programme was set up, the basis of the surveillance area was not on administrative area (lääni/län) but temperature zones in Finland. Also highest risk for spread of BTV-carrying midges was considered coming from south-west, which is the prevailing wind. Therefore, the intensified surveillance area A was set to cover the coastal areas of Southern Finland.

Area at highest risk for introduction of BTV was considered being the most south-western archipelago area (islands of Area A1 = Ahvenanmaa in the map). Ahvenanmaa is the most ruminant dense area in the whole country. Therefore also sheep and goat herds from the Ahvenanmaa archipelago have been included in the program.
Number of dairy and suckler cow herds on area A is about 1.000 and 240, respectively. There are about 7700 dairy herds and some 2800 suckler cow herds on area B.

Evira has made risk profile about BT and this has been published in 2009 (summary in English, complete report in Finnish, copy enclosed). Also during 2012 Schmallenberg virus spread to Area A and B and this was detected from suckler cow herd samples. This spreading demonstrated that vector-spread diseases are able to invade the areas which were originally considered as high risk and risk areas for BT. During
the spring 2013 survey was carried out from dairy bulk milk samples for the Schmallenberg presence of antibodies in order to obtain more detailed knowledge of spread of Schmallenberg virus. Schmallenberg antibody positive samples were detected up to the northern border of BT area B. The link to Evira.fi webpage is http://www.evira.fi/files/attachments/fi/elaimet/elainten_terveys_ja_elaintaudit/elaintaudit/lypsykarjojen_tankkimaltoseuranta_2013.jpg (red triangles = detected, black circles = not detected). Based on all these information on climate zones, wind conditions, animal densities) the sampling protocol in our BT surveillance programme is justified.

4.4 Description of the measures of the programme

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

4.4.1 Notification of the disease

(max. 32000 chars):

In Finland every stakeholder is obliged to inform the local official veterinarian if she/he suspects easily transmitted contagious animal disease, as bluetongue is according to Finnish legislation. The local official veterinarian then notifies to the Regional State Administrative Agency, the RSAA Evira and Evira ministry. Ministry then notifies according to the Decisions.

4.4.2 Target animals and animal population

(max. 32000 chars):
Dairy cattle, beef cattle, sheep, goats. Imported animals susceptible to BT.

There are about 1000 dairy herds, 240 suckler cow herds on area A. There are some 60 sheep and/or goat herds on the Åland Archipelago. Sampling is carried out from the flocks which belong to the national control programme for maedi-visna/CAE. Herds having more than 20 ewes should be sending samples for MV/CAE testing. These are included in the BT programme.

All area A and B suckler cow herds have continuing request for providing blood samples from animals during slaughter. These are collected by veterinarians and send to Evira for testing. As sample flow is all-year-round continuous data are ob-tained about BT situation.

Sampling of all dairy herds on Area A is not based on sample size calculation but based on epidemiological risk area. The sample collection of herd milk samples is done by dairies thus collecting
all herds along the collection routes is easier than making representative sampling. The number of herds (around 1000 dairy herds on Area A) was considered so small that no other risk-based approach other than cli-mate zone and geographical area was considered necessary.

Number of suckler cow herds on area A is about 240. Samples are obtained only when animals are sent for the slaughter. Farms are not slaughtering animals every year as they sell young animals forward. In 2012 animals from 155 herds were tested. Again the number of herds and animals.

Due to reduced risk of BTV in Europe already seen during 2010, the decision was made to carry out BTV antibody testing only in dairy herds of Area A and test herd milk only once a year from 2011 onwards.

4.4.3 Identification of animals and registration of holdings

(max. 32000 chars):
The identifications can be obtained from cattle register and sheep and goat register (Evira).

4.4.4 Qualifications of animals and herds

(max. 32000 chars):
All dairy herds and all beef cattle herds in the Area A are included. Due to sampling techniques and pooling, also beef cattle herds from area B are included. Sheep and goat farms, which send blood samples to other eradication programs are samplen in the Area A. Samples from imported animals are taken by random sampling. Imported animals are sampled when so requested by Evira’s Control Department. The sampling is carried out when inspection after entry to Finland takes place.

4.4.5 Rules of the movement of animals

(max. 32000 chars):
In case of a positive herd for BT, zoning according to the Directive 2000/75/EC will take place.

4.4.6 Tests used and sampling schemes
Tests used are antibody ELISA and PCR for BTV. Tests are performed in the national reference laboratory Finnish Food Safety Authority Evira. The Dairy herds in the Area A are tested in November. Beef cattle, sheep and goat samples are tested once a year. PCR tests are performed in case of positive antibody assays and from the samples obtained from imported animals.

- Modalities of ELISA milk testing (pool, selection of herd’s animals distribution per region etc.)
  Herd milk samples are used. Samples are not pooled for testing. All dairy herds from Area A (intensified surveillance) are planned to be tested 2014 once due to reduced risk of BTV in Europe.

In Areas B and C, no active surveillance in any species due to the favourable situation in Europe. However, blood samples from beef cattle from area B are included into the survey.

- Modalities of serological testing (same as above)
  Slaughtered animals are sampled at slaughter house from suckler cow herds located in Area A. These samples are tested in pools of 10. The sensitivity of serological test used is adequate to detect antibodies even if one out of 10 samples is positive.

For sheep, samples collected for maedi-visna monitoring programme from Åland Archipelago are also tested for BTV antibodies.

Case definition used in Finland is in line with the definition in the Commission Regulation 1266/2007. Due to import of vaccinated animals antibody testing alone may not be sufficient to diagnose BTV infection in the herd, thus PCR is used for virus detection. Of course, if earlier negative test results are available seroconversion can also be used to confirm the BTV positive case. Clinical signs are not pathognomonic for BTV, thus, in the areas, which are free of BTV, the diagnosis cannot be made by clinical signs alone. PCR is available for virus detection and PCR positive sample can be further typed for specific BTV serotype.

4.4.7 Vaccines used and vaccination schemes

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

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

4.4.9 Measures in case of a positive result
A short description is provided of the measures as regards positive animals (slaughter, destruction 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 infected holdings).

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

4.4.10 Compensation scheme for owners of slaughtered and killed animals

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

4.4.11 Control on the implementation of the programme and reporting

Evira will control the implication of the programme and report via the Ministry of Agriculture and Forestry. Regional State Administrative Agencies control the sample taking from living animals.

5. Benefits of the programme

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

Bluetongue has never been detected in Finland. However, during 2006-2008 bluetongue was spreading very rapidly in EU area and reached Sweden and later Norway. The benefit of this program is to notice as soon as possible if bluetongue is spreading into Finland. The benefit of this programme is also to survey a vector transmitted disease in ruminants.
6. Data on the epidemiological evolution during the last five years

Data already submitted via the online system for the years 2008-2011: [Yes]

6.1 Evolution of the disease

Evolution of the disease: [Not applicable] [Applicable...]

6.2 Stratified data on surveillance and laboratory tests
### 6.2.1 Stratified data on surveillance and laboratory tests for year: 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>Animal Species</th>
<th>Test Type</th>
<th>Test Description</th>
<th>Number of samples tested</th>
<th>Number of positive samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td>Bovine</td>
<td>serological test</td>
<td>ELISA, milk</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>whole country</td>
<td>Bovine</td>
<td>serological test</td>
<td>ELISA, serum</td>
<td>1,280</td>
<td>0</td>
</tr>
<tr>
<td>Ahvenanmaa</td>
<td>Sheep</td>
<td>serological test</td>
<td>ELISA, serum</td>
<td>165</td>
<td>0</td>
</tr>
<tr>
<td>whole country</td>
<td>Bovine</td>
<td>microbiological or virological test</td>
<td>PCR</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td>whole country</td>
<td>Goats</td>
<td>microbiological or virological test</td>
<td>PCR</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>whole country</td>
<td>Sheep</td>
<td>microbiological or virological test</td>
<td>PCR</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>1,497</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 6.3 Data on infection

- **Data on infection:**
  - ⊗ Not applicable
  - ☑ Applicable...
6.4 Data on the status of herds

Data on the status of herds:  ⊗ Not applicable  ⊗ Applicable...
6.5 Data on vaccination or treatment programmes

*Data on vaccination or treatment programmes is*  
- Not applicable  
- Applicable...

6.6 Data on wildlife

*Data on Wildlife is:*  
- Not applicable  
- Applicable...
7. **Targets**

The blocks 7.1.1, 7.1.2.1, 7.1.2.2, 7.2, 7.3.1 and 7.3.2 are repeated multiple times in case of first year submission of multiple programs.

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

7.1.1 **Targets on diagnostic tests for year:**  **2014**

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of the test</th>
<th>Target population</th>
<th>Type of sample</th>
<th>Objective</th>
<th>Number of planned tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td>milk ELISA</td>
<td>Bovines</td>
<td>milk</td>
<td>surveillance</td>
<td>860</td>
</tr>
<tr>
<td>whole country</td>
<td>serum ELISA</td>
<td>Bovines</td>
<td>serum</td>
<td>surveillance</td>
<td>1280</td>
</tr>
<tr>
<td>Ahvenanmaa</td>
<td>serum ELISA</td>
<td>Sheep and goat</td>
<td>serum</td>
<td>surveillance</td>
<td>165</td>
</tr>
<tr>
<td>whole country</td>
<td>PCR</td>
<td>Bovines</td>
<td>serum</td>
<td>surveillance</td>
<td>50</td>
</tr>
</tbody>
</table>

**Total** 2 355

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Add a new row
7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on testing herds

Not applicable

Applicable...

7.1.2.2 Targets on testing animals

Not applicable

Applicable...

7.2 Targets on qualification of herds and animals

Targets on qualification of herds and animals

Not applicable

Applicable...
7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment is  ◐ Not applicable  ◐ Applicable...

7.3.2 Targets on vaccination or treatment of wildlife is  ◐ Not applicable  ◐ Applicable...
### 1. Testing

<table>
<thead>
<tr>
<th>Specification</th>
<th>Unit</th>
<th>Number of units</th>
<th>Total amount in EUR</th>
<th>Unitary cost in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cika (serum antibody detection)</td>
<td>16</td>
<td>2.34</td>
<td>35.08</td>
<td>2.19</td>
</tr>
<tr>
<td>Tasa (serum antibody detection)</td>
<td>128</td>
<td>2.34</td>
<td>309.64</td>
<td>2.43</td>
</tr>
<tr>
<td>Individual animal sample test</td>
<td>50</td>
<td>9.29</td>
<td>463.50</td>
<td>9.27</td>
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<tr>
<td>Individual animal sample test</td>
<td>2355</td>
<td>0.5</td>
<td>1177.50</td>
<td>0.51</td>
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### 2. Vaccination and treatment

<table>
<thead>
<tr>
<th>Specification</th>
<th>Unit</th>
<th>Number of units</th>
<th>Total amount in EUR</th>
<th>Unitary cost in EUR</th>
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<tr>
<td>Domestic animals</td>
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</table>

### 3. Slaughter and destruction

<table>
<thead>
<tr>
<th>Specification</th>
<th>Unit</th>
<th>Number of units</th>
<th>Total amount in EUR</th>
<th>Unitary cost in EUR</th>
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### Notes

1. Fill-in the text fields in ENGLISH.
2. If you need to further specify a pre-loaded option, please keep the pre-loaded text and add your clarification to it in the same box.
<table>
<thead>
<tr>
<th>Cost related to</th>
<th>Specification</th>
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<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Community funding requested</th>
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<td>Add a new row</td>
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<td>Add a new row</td>
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<tr>
<th>Cost related to</th>
<th>Specification</th>
<th>Unit</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Union funding requested</th>
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<tr>
<th>Cost related to</th>
<th>Specification</th>
<th>Unit</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Union funding requested</th>
</tr>
</thead>
</table>

| Total | | | 4 073,76 € |
| Add a new row |
Attachments

IMPORTANT:
1) The more files you attach, the longer it takes to upload them.
2) This attachment files should have one of the format listed here: jpg, jpeg, tiff, tif, xls, doc, bmp, png, pdf.
3) The total file size of the attached files should not exceed 2500Kb (+/ 2.5 Mb). You will receive a message while attaching when you try to load too much.
4) IT CAN TAKE SEVERAL MINUTES TO UPLOAD ALL THE ATTACHED FILES. Don't interrupt the uploading by closing the pdf and wait until you have received a Submission Number!