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

Survey programme for Avian Influenza in poultry and wild birds

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

Denmark

* in accordance with Council Decision 2009/470/EC
Standard requirements for the submission of surveillance programmes for avian influenza

1. Identification of the programme

Member state: DANMARK

Disease: avian influenza in poultry and wild birds

Request of Community co-financing from beginning of: 2011 to end of 2011

1.1 Contact

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Fax: +45 72 27 65 01

Email: brb@fvst.dk

2. Description of the surveillance programme in poultry

2.1 Objectives, general requirements and criteria

(max. 4000 chars):

The objectives for the surveillance programme for avian influenza (AI) in poultry and game birds for restocking in 2011 will be:

- Detecting sub-clinical infections with LPAI of subtypes H5 and H7 thereby complementing early detection systems and subsequently preventing possible mutations of these viruses to HPAI.
- Detecting infections of LPAI H5 and H7 subtypes in specifically targeted poultry populations at specific risk of infection due to their husbandry system or the susceptibility of specific species.
- Contributing to the demonstration of a free status in the frame of international trade according to OIE rules.

The programme will be implemented for the entire Denmark.

The National Veterinary Institute is the National Reference Laboratory (NRL) for the diagnosis of AI. The NRL performs all the serological and virological diagnostic analyses for AI in Denmark. Serological and virological tests will be performed according to methods required by the Diagnostic Manual (Decision
Standard requirements for the submission of surveillance programmes for avian influenza

2006/437/EC).


All laboratory results from the survey in poultry and game birds for restocking will be transferred to a poultry database at the Danish Meat Association, where the results are recorded. The DVFA has on line access to the database. Positive results are also send by e-mail directly from the National Veterinary Institute to the DVFA.
2.2 Design and implementation

Commercial holdings with more than 100 animals in a target group will be included and tested once or more frequently. Breeder flocks will be tested once a year, pullets before release to egg production, outdoors layers four times a year and outdoor slaughter poultry before slaughter. In addition, turkeys are tested before slaughter. In risk areas, breeder flocks and indoor layers are tested twice a year. Risk areas are defined as areas 3 km from the coastal line and around large lakes. Holdings with game birds for restocking will be tested four times a year during the season from February to August. The first test is on blood samples from breeding animals and the three other tests are PCR test on offspring. Further, when poultry and game birds are traded, they had to be accompanied by a certificate stating that the herd had been tested within the preceding three months for poultry and two months for game birds.

Requirements and criteria stated in Commission Decision of 13 April 2007 (2007/268/EC) are complied with from 1 January to 17 February 2011.

Requirements and criteria stated in the new Commission Decision of 25 June 2010 (2010/367/EC) on the implementation of surveillance programmes for avian influenza in poultry and wild birds are complied from 17 February 2011.

The application for financial contribution for the programme in poultry and game birds for restocking only includes the estimated total expenditure on eligible measures. That means that only the number of holdings to be sampled according to table 1 and table 2 in Commission Decision 2007/268/EC are stated in tables 2.2.1 and 2.2.2, rather than the total number of holdings to be sampled, under here PCR-tests of samples from game birds offspring, to be tested according to the Danish A1 surveillance programme.
Standard requirements for the submission of surveillance programmes for avian influenza

2.2.1 Poultry holdings (except ducks and geese) to be sampled

<table>
<thead>
<tr>
<th>Category</th>
<th>broilers</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NUTS (2)(a)</th>
<th>Total number of holdings</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests to be performed per method</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>180</td>
<td>Hemagglutination-inhibition test (HI)</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>9</td>
<td></td>
<td>180</td>
<td></td>
</tr>
</tbody>
</table>

In (a) refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used, coordinates (longitude/latitude) are requested. Please fill in these values directly in the field.

<table>
<thead>
<tr>
<th>Category</th>
<th>fattening turkeys</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NUTS (2)(a)</th>
<th>Total number of holdings</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests to be performed per method</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>46</td>
<td>46</td>
<td>10</td>
<td>920</td>
<td>Hemagglutination-inhibition test (HI)</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>46</td>
<td></td>
<td>920</td>
<td></td>
</tr>
</tbody>
</table>

In (a) refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used, coordinates (longitude/latitude) are requested. Please fill in these values directly in the field.
### Category: Chicken Breeders

<table>
<thead>
<tr>
<th>NUTS 2 (a)</th>
<th>Total number of holdings</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests to be performed per method</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>472</td>
<td>60</td>
<td>10</td>
<td>1,270</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>Total</td>
<td>472</td>
<td>60</td>
<td></td>
<td>1,270</td>
<td>700</td>
</tr>
</tbody>
</table>

(Refer to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used, coordinates (latitude/longitude) are requested. Please fill in these values directly in the field.)

### Category: Laying Hens

<table>
<thead>
<tr>
<th>NUTS 2 (a)</th>
<th>Total number of holdings</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests to be performed per method</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>41</td>
<td>35</td>
<td>10</td>
<td>700</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>35</td>
<td></td>
<td>700</td>
<td>700</td>
</tr>
</tbody>
</table>

(Refer to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used, coordinates (latitude/longitude) are requested. Please fill in these values directly in the field.)

### Category: Free Range Laying Hens

<table>
<thead>
<tr>
<th>NUTS 2 (a)</th>
<th>Total number of holdings</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests to be performed per method</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>41</td>
<td>35</td>
<td>10</td>
<td>700</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>35</td>
<td></td>
<td>700</td>
<td>700</td>
</tr>
</tbody>
</table>

(Refer to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used, coordinates (latitude/longitude) are requested. Please fill in these values directly in the field.)
### Serological Investigation

**Duck and goose holdings to be sampled according to point C of Annex I to Decision 2007/268/EC**

<table>
<thead>
<tr>
<th>NUTS 2</th>
<th>Total number of holdings</th>
<th>Total number of holdings</th>
<th>Number of samples per holding</th>
<th>Total number of samples to be performed per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.066</td>
<td>100%</td>
<td>Hemagglutination-inhibition test (H)</td>
<td>120</td>
<td>1,200</td>
</tr>
</tbody>
</table>

**Farmed feathered game**

<table>
<thead>
<tr>
<th>NUTS 2</th>
<th>Total number of holdings</th>
<th>Total number of holdings</th>
<th>Number of samples per holding</th>
<th>Total number of samples to be performed per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.078</td>
<td>100%</td>
<td>Hemagglutination-inhibition test (H)</td>
<td>30</td>
<td>300</td>
</tr>
</tbody>
</table>

**Reference**
- The reference of the holding region in Section 1.05 of Annex I to Decision 2007/268/EC must be used, coordinates should be used and additional information should be provided in accordance with the guidelines issued in the field.
Standard requirements for the submission of surveillance programmes for avian influenza

<table>
<thead>
<tr>
<th>NUTS 2 (EU)</th>
<th>Total number of duck and greylag holdings</th>
<th>Total number of duck and greylag holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests to be performed per method</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>133</td>
<td>60</td>
<td>20</td>
<td>1,200</td>
<td>Haemagglutination inhibition test (HI)</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>60</td>
<td></td>
<td>1,200</td>
<td></td>
</tr>
</tbody>
</table>

NUTS refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (latitude/longitude) are requested. Please fill in these values directly in the field.

2.3 Laboratory testing: description of the laboratory tests used

Description of the used serological tests: (max 4000 chars)

Serological tests will be carried out using haemagglutination inhibition test (HI test) in accordance with the avian influenza diagnostic manual (Commission Decision 2006/437/EC). The antigens and control sera will be received from the Community Reference Laboratory. Using four HA units of antigen in the tests, sera with titres equal to or above 16 (4 log2) will be considered positive.

The virus strains provided by the Community Reference Laboratory will be used as antigen in the initial test. Samples that are positive in tests with the initial antigen will be subjected to a further confirmatory test with the recommended strain for the specific H-subtype. A serum sample will be considered positive only if HI titres were equal to or above 16 with both antigens of the same subtype.

3. Description of the surveillance programme in wild birds

3.1 Objectives, general requirements and criteria
Standard requirements for the submission of surveillance programmes for avian influenza

The objectives for the surveillance programme for avian influenza (AI) in wild birds will be the timely detection of HPAI of the subtype H5N1 in wild birds in order to protect poultry in poultry holdings and safeguard veterinary public health.

Requirements and criteria stated in the new Commission Decision of 25 June 2010 (2010/367/EC) on the implementation of surveillance programmes for avian influenza in poultry and wild birds will be complied with.

3.2 Design and implementation

A risk-based surveillance of HP AI H5N1 will be implemented in wild dead or sick birds:

(a) A risk-based surveillance will be implemented as a 'passive' surveillance system by laboratory investigation of moribund wild birds or birds found dead and specifically directed towards water bird species.
(b) Wild birds, in particular migratory water birds, that have been shown to be at a higher risk of becoming infected with, and transmitting the HPAI H5N1 virus, the 'target species', will be specifically targeted.
(c) Areas close to the sea, lakes and waterways where birds were found dead; and in particular when these areas are in close proximity to poultry holdings, especially in areas where there is a high density of poultry holdings, will be targeted.

A cooperation will be established with the Danish Forest and Nature Agency, the National Environmental Research Institute, the Danish Hunters Association, the Danish Fishing Association, the Danish Ornithological Society and the regional veterinary and food administration centres. Focus will also be to enhance the alertness among the general public.
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The surveillance programme can be adjusted, if the epidemiological situation changes.
### 3.2.1 WILD BIRDS - investigation according to the surveillance programme for avian influenza in wild birds set out in Annex II to Decision 2007/268/EC

<table>
<thead>
<tr>
<th>NUTS 2</th>
<th>Wild birds to be sampled</th>
<th>Total number of birds to be sampled</th>
<th>Estimated total number of samples to be taken for active surveillance</th>
<th>Estimated total number of samples to be taken for passive surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS 2</td>
<td>Dead or sick birds</td>
<td>300</td>
<td>0</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>300</td>
<td>0</td>
<td>300</td>
</tr>
</tbody>
</table>

*Note: The place of collection for birds/samples in case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used; regions defined in the programme by the Member State is accepted. Please fill in these values directly in the field.*
Standard requirements for the submission of surveillance programmes for avian influenza

3.3 Laboratory testing: description of the laboratory tests used

The National Veterinary Institute is the National Reference Laboratory (NRL) for the diagnosis of AI. The NRL performs all serological and virological diagnostic analyses for AI in Denmark. Virological tests will be performed according to methods required by the Diagnostic Manual (Decision 2006/437/EC).

The primary diagnostic procedures will be based on real-time RT-PCR or RT-PCR methods, but will also include virus isolation by inoculation in SPF embryonated eggs. The methods conform to the methods required by with the avian influenza diagnostic manual (Commission Decision 2006/437/EC).

The specific RT-PCR analysis for general influenza A applied primers are specific to the viral matrix (M) gene. The H5 and H7 specific analyses apply primers, which only detects the viral haemagglutinin (HA) gene of the H5 and H7 subtypes, respectively.

Samples from dead or sick wild birds:
Analyses for general influenza virus (M-gene) and specific H5 subtype RT-PCR detection are performed on all samples received for influenza diagnosis.
1) If a sample is tested positive in general and negative for H5, a supplementary H7 analysis is performed.
2) If a sample is detected positive for H5 or H7 the RT-PCR product is sequenced for confirmation of the H5 or H7 subtype and for characterisation of the virus in terms of pathogenicity.
3) If a sample is positive by the M-gene RT-PCR the sample is inoculated in SPF embry-onated eggs.

Virus cultivation utilise 8-10 days old embryonated SPF eggs, which are inoculated by the allantoic route. The eggs are incubated for one week and the harvest of allantoic fluid is tested for presence of haemagglutinating viruses. Agglutinating viruses are H-typed by HI test. In addition, identification of RT-PCR and sequencing is carried out in accordance with the above description.

A final characterisation of a virus isolate is done by conventional neuraminidase test (N-typing). In addition, a N-1 specific RT-PCR method may be applied to samples collected either directly from sick or dead birds or harvested from inoculated SPF embryonated eggs.
4. Description of the epidemiological situation of the disease in poultry during the last five years

In 2006, the surveillance of AI in poultry was extended and more intensified than previous programmes. Besides the surveillance programme for poultry, the programmes included game birds for restocking and holdings (with more than 100 animals) trading poultry or game birds. Holdings situated in appointed risk areas were tested more frequently than holdings outside risk areas. During the surveillance, ten flocks or holdings were found to have serologic positive samples. The holdings were managed as holdings under suspicion for avian influenza. However, testing with PCR showed no circulating virus in any of these holdings. Due to routine PCR-testing on offspring from game birds, detection of LPAI was done in three game bird holdings with mallards (one HSN2 and two HSN3) in 2006. These three holdings were all culled due to the detection of LPAI H5. In two of these holdings, the infection was thought to originate from contact with wild birds. In the third holding, the infection most likely originated from indirect contact with one of the other infected holdings. There were no clinical signs in any of these holdings.

In spring 2006, one outbreak of HPAI H5N1 was reported in a back-yard flock with clinically diseased and dead birds. The outbreak of HPAI was the first outbreak in poultry ever recorded in Denmark. The outbreak occurred during the epidemic of H5N1 in wild birds in the Baltic area. The virus was of the same type as the one that had previously been detected in wild birds in the area. It was concluded, that the source of infection most likely was wild birds, possibly transmitted by direct contact. However, no direct evidence exists for this hypothesis. This outbreak did not cause any secondary outbreaks, and reoccurrence of HPAI H5N1 in poultry has not been observed since then.

The extended and more intensified surveillance programme in poultry and game birds for restocking has continued since 2006:

In 2007, eight seropositive holdings were managed as holdings under suspicion for avian influenza. However, testing with PCR showed no circulating virus in any of these holdings.

In 2008, seven seropositive holdings were managed as holdings under suspicion for avian influenza. The holdings were investigated and samples for virological examination were taken. One holding was found positive by virological tests. The holding had breeding geese, ducks and mallards. There had been a serological reaction against H5 in the breeding geese. Following an investigation of tracheal and cloacal swabs low pathogenic H7N1 was detected.
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by PCR followed by sequencing in cloacal swabs from the domestic ducks. The most likely source of infection is introduction by wild birds as low pathogenic avian influenza H7N1, with sequence identical with isolates from the domestic ducks, were detected in wild mallards in a nearby lake.

In 2009, three seropositive holdings were managed as holdings under suspicion for avian influenza. However, testing with PCR showed no circulating virus in any of these holdings.

In March 2010, two outbreaks of low pathogenic avian influenza H7 were reported in holdings with mallards. The mallards were tested in accordance with the surveillance programme and there had not been clinical signs of disease among the animals. Following an investigation of tracheal and cloacal swabs low pathogenic H7N1 was detected in one of the holding, in the other holding virus isolation was not possible.

4.1 Measures included in the programme for surveillance in poultry

4.1.1 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme

(max. 4000 chars):

The DVFA carry out the programme assisted by the two Regional Veterinary and Food Administration Centres in Denmark. The central coordination activities at the DVFA are placed in the Animal Health Division in collaboration with the 2 regions, The National Veterinary Institute and Danish Meat Association.

4.1.2 System in place for the registration of holdings
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Commercial holdings with poultry like holdings with cattle, pigs, sheep, goats, and commercial holdings with deer, foxes, minks and fish are recorded in a central database, called the Central Husbandry Register (CHR), which is owned by the Ministry of Food, Agriculture and Fisheries. The rules for registration are laid down in Order No. 59 of 18 January 2010 on registration of holdings in CHR. The CHR stores information on the unique holding code, the address and the geographic coordinates of the holding, data on the farmer, number of animals of all species and veterinary information. Commercial poultry farmers are obliged to register their holding in the CHR. Likewise poultry farmers are obliged to report if the holding is closed down. It is voluntary for owners of backyard flocks to register their holding in CHR. However, if outbreaks of HPAI H5N1 occur in wild birds or AI H5 or H7 in a poultry holding, then it is also mandatory for owners of backyard flocks in zones to register their holding.

4.1.3 Data on vaccination carried out

In Denmark it is prohibited to vaccinate against avian influenza except susceptible birds kept in zoos, which can be vaccinated according to Commission Decision 2007/598/EC concerning measures to prevent the spread of highly pathogenic avian influenza to other captive birds kept in zoos and approved bodies, institutes or centres in the Member States.

However, no birds in zoological gardens are included in the programme for poultry AI-surveillance. Zoological gardens are regarded as permanent quarantines, where birds are kept isolated from other poultry and captive birds in Denmark.

5. Description of the epidemiological situation of the disease in wild birds during the last five years

The first screening programme for AI in wild birds in Denmark was carried out in autumn 2002, and was performed on samples taken in connection with an epidemiological investigations of a Newcastle disease outbreak in Denmark. In 2003 - 2005 the surveillance programmes consisted of samples of birds
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droppings from wild live birds collected at different locations in Denmark. As from 2006 the surveillance programme consists of a passive surveillance in wild birds found dead and an active surveillance of live birds in waterfowl reservoirs and along migratory flyways, birds living in proximity to domestic poultry and surveillance of hunted game birds. In the active surveillance samples are taken as cloacal and tracheal swabs from each bird.

The results from the surveillance programmes shows that the low pathogenic forms of avian influenza occurs naturally among Danish waterfowl, especially in ducks.

During the spring of 2006, an epidemic of HP H5N1 in wild birds occurred in the Baltic area. In Denmark the first finding of HPAI H5N1 in wild birds was confirmed on 14 March 2006. A sequence analyses revealed that the virus isolated in Denmark was similar to the viruses found in other European countries. In total, 44 wild birds were found infected with HPAI H5N1 in six counties in March-May of 2006. The last case was confirmed on 29 May. In total, 1190 dead birds were examined in 2006. The dead wild birds were sent in from the whole country but the positive findings were concentrated in the southeastern part of Denmark especially along the Baltic Sea. The infected birds were found in areas where the density of wild ducks and swans is normally high in winter/early spring. Since 2006, HP H5N1 has not been detected in wild birds in Denmark.

5.1 Measures included in the programme for surveillance in wild birds

(max 4000 chars)

Please see below.

5.1.1 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme
Standard requirements for the submission of surveillance programmes for avian influenza

The DVFA is the central authority responsible for implementing the programme. A cooperation will be established with the National Veterinary Institute, Danish Forest and Nature Agency, the National Environmental Research Institute, the Zoological Museum at the University of Copenhagen, the Danish Emergency Management Agency, the Danish Hunters Association, the Danish Fishing Association, the Danish Ornithological Society and the regional veterinary and food administration centres.

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

The programme will cover the whole country.

5.1.3 Estimation of the local and/or migratory wildlife population

Table showing the local and migratory wildlife population in Denmark:

<table>
<thead>
<tr>
<th>Species</th>
<th>Total population size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widgeon</td>
<td>1500000</td>
</tr>
<tr>
<td>Teal</td>
<td>500000</td>
</tr>
</tbody>
</table>
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Mallard - 4500000
Pintail - 60000
Shoveler - 40000

Tufted Duck - 1200000
Goldeneye - 1000000-1300000
Common Pochard - 350000
Common Eider - 760000
Greater Scaup - 310000

Great Cormorant - 75000a

Whooper Swan - 59000
Mute Swan - 250000
Bewick's Swan - 20000

Taiga Bean Goose - 70000-90000
Pink-footed Goose - 42000
Greater White-fronted Goose - 1000000
Greylag Goose - 500000
Barnacle Goose - 420000
Light-bellied Brent Goose - 7000
Dark-bellied Brent Goose - 200000

Lapwing - 5100000-8400000
Golden Plover - 1400000-2100000

Great Black-backed Gull 180000
Herring Gull - 1700000-3600000b
Common Black - 1200000-2250000
Standard requirements for the submission of surveillance programmes for avian influenza

a: Subspecies sinensis breeders in Denmark
b: Subspecies argentatus breeding/wintering in NW-Europe


6. Measures in place as regards the notification of the disease

(4000 chars):

All suspicions of AI including poultry showing clinical symptoms of the disease must be reported to the veterinary authorities as laid down in Order No. 693 of 21 June 2007 (HPAI) and Order No. 943 of 14 September 2006 (LPAI) with later amendments. Seropositive holdings will be managed as holdings under suspicion for avian influenza. Holdings will be investigated and samples for examination will be taken. The Regional Veterinary and Food Administration Centres will impose movement restrictions on the farm and on possible contact farms.

Rules for compensation of farmers with animals, that have to be killed due to infection with AI subtype H5 or H7, are laid down in Order No. 239 of 12 April 1991 concerning expenses and compensation related to eradication and prevention of animal diseases as amended by Order No. 812 of 29 October 1999. The animals are compensated at the market value and the DVFA cover 20% of the estimated loss of profits.

In case the general public find dead birds in nature they have to contact the Regional Veterinary and Food Administration Centres. If AI is suspected the birds are under appropriate safety measures collected by personnel from the Danish Emergency management agency and brought to The National Veterinary Institute for virological examination. The wild birds shall be collected on the same day or if notified after 1 pm on the following day.
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7. Costs

7.1 Detailed analysis of the costs

7.1.1 Poultry

(max 4000 chars):
Serological test: HI test for H5 and H7.

Price for laboratory examinations:
Price for one H5 test: 55 DKK = 7.39 Euro
Price for one H7 test: 55 DKK = 7.39 Euro

Exchange rate 1 April 2010: 7.4448

7.1.2 Wild birds

(max 4000 chars):
Estimated number of dead or sick wild birds to be tested: 300
Total number of PCR tests: 300
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Total number of VI tests: 30

Total estimation of expenditure passive surveillance in wild birds:
The estimated total costs for PCR test and virus isolation: 163,500 DKK = 21,961 Euro

Exchange rate 1 April 2010: 7.4448


### Summary of the costs

#### Poultry surveillance

<table>
<thead>
<tr>
<th>Methods of laboratory analysis</th>
<th>Number of tests to perform per method</th>
<th>Unitary test cost (per method) in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELISA test</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Agar gel immune diffusion test</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Haemagglutination-inhibition-test (H5) for H5 (specify number of tests for H5)</td>
<td>4,160</td>
<td>7,89</td>
<td>32,742.4</td>
</tr>
<tr>
<td>Haemagglutination-inhibition-test (H7) for H7 (specify number of tests for H7)</td>
<td>4,160</td>
<td>7,89</td>
<td>32,742.4</td>
</tr>
<tr>
<td>Virus isolation test</td>
<td>14</td>
<td>86.71</td>
<td>1214.94</td>
</tr>
<tr>
<td>PCR test</td>
<td>326</td>
<td>36.75</td>
<td>11,983.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,656</strong></td>
<td></td>
<td><strong>74,792.16 €</strong></td>
</tr>
</tbody>
</table>

#### Sampling

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.2.2  **Wild bird surveillance**

<table>
<thead>
<tr>
<th>Methods of laboratory analysis</th>
<th>Number of tests to perform per method</th>
<th>Unitary test cost (per method) in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haemagglutination-inhibition test (H1) for H5H7</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Virus isolation test</td>
<td>30</td>
<td>96.71</td>
<td>2901.3</td>
</tr>
<tr>
<td>PCR test</td>
<td>330</td>
<td>63.53</td>
<td>19659</td>
</tr>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>330</td>
<td>160.24 €</td>
<td>21 950.30 €</td>
</tr>
</tbody>
</table>

| Sampling | 300 | 37.28 | 11 184.00 € |

**Total** | 200 | 37.28 € | 11 184.00 € |
Standard requirements for the submission of surveillance programmes for avian influenza

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: .zip
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.