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

Survey programme for Avian Influenza (AI)

Approved* for 2012 by Commission Decision 2011/807/EU

Romania

* in accordance with Council Decision 2009/470/EC
Standard requirements for the submission of surveillance programmes for avian influenza
version : 2.1

1. Identification of the programme

Member state: ROMANIA

Disease: avian influenza in poultry and wild birds

Request of Community co-financing from beginning of: 2012 to end of 2012

1.1 Contact

Name: Stefan NICOLAE - General Director of the General Sanitary Veterinary Service

Phone: +40374150258

Fax: +40374150258

Email: nicolae.stefan@ansvsa.ro

2. Description of the surveillance programme in poultry

2.1 Objectives of surveillance programmes

(max. 32000 chars):

The objectives of the surveillance programmes for avian influenza in poultry are to inform the competent authority of circulating avian influenza virus with a view to controlling the disease in accordance with Directive 2005/94/EC by the annual detection through active surveillance for:

(a) low pathogenic avian influenza (LPAI) of subtypes H5 and H7 in gallinaceous birds (namely chickens, turkeys, guinea fowl, pheasants, partridges and quails) and ratites thereby complementing other existing early detection systems;

(b) LPAI of subtypes H5 and H7 and highly pathogenic avian influenza (HPAI) in domestic waterfowl (namely ducks, geese and mallards for re-stocking supplies of game);
2.2  Design, implementation and target population

(max. 32000 chars):

Sampling and serological testing in poultry holdings shall be carried out in order to detect the presence of antibodies to avian influenza, as defined in Directive 2005/94/EC.

That active surveillance complements the early detection systems already in place in Member States, as provided for in Decision 2005/734/EC and in Chapter II of the Diagnostic Manual for avian influenza approved by Commission Decision 2006/437/EC (the Diagnostic Manual); in particular those implemented in poultry holdings that are deemed at being at a higher risk for avian influenza introduction.

Two main internationally recognised methods exist for animal disease surveillance: (a) risk-based surveillance; and (b) surveillance based on representative sampling.

2.2.1  Risk based surveillance (RBS)

(max. 32000 chars):

Based on a risk assessment and the specific situation concerning Romania, the sampling design also considered:
(a) The types of production specific for Romania, and their specific risks: commercial farms positioned in areas that are the biotope of wild birds, backyard flocks where poultry are keeping outdoor, the vicinity with wetlands, the vicinity with water sources, lakes and pools, the presence of more than one species on the holding or other relevant factors;
(b) The number of turkey, duck and geese from commercial or non-commercial holdings to be sampled will be defined to ensure the identification of at least one infected holding if the prevalence of infected holdings is at least 5%, with a 99% confidence interval.
(c) Where holdings producing game, ratites and quails are present, they shall be included in the programme. With regard to quails only adult (or laying) breeders shall be sampled.
(d) The sample will be harvested in the seasonal production, for the commercial farms, and during the entire year, for backyards. However, where appropriate, sampling can be adapted to other identified periods at local level, during which time the presence of other poultry hosts on a holding might pose a greater risk for disease introduction (e.g. in the Danube Delta area, along Danube River and in the neighbourhood of pools and lakes that are biotope for wild birds).
(e) Surveillance will be obligatory extended to backyards flocks, their number being significant for Romania. The carried out risk analysis revealed the existence of 717 „target” localities. We mention that within the same noncommercial holdings situated in the respective 717 “target”localities, there are reared gallinaceae as well as palmipedes.
2.2.2  Surveillance based on Representative Sampling

Romania is not in a position to carry out a sufficiently evidence-based assessment of the risk pathways for infection of poultry flocks on its territory, that's why it shall implement surveillance based on a representative sampling scheme. The number of poultry holdings to be sampled must correspond to those in Tables 1 and 2 in accordance with E.C. Decision 2010/367, depending on the poultry species.

Sampling for serological testing for avian influenza shall be stratified throughout the whole territory of Romania, so that samples can be considered as representative for the whole of Romania.

3. Target populations

The sampling of the following poultry species and production categories shall be included in the surveillance programme:

(a) laying hens;
(b) free range laying hens;
(c) chicken breeders;
(d) turkey breeders;
(e) duck breeders;
(f) geese breeders;
(g) fattening turkeys;
(h) fattening ducks;
(i) fattening geese;
(j) farmed game birds (gallinaceous) focusing on adult birds such as breeding birds;
(k) farmed game birds (waterfowl);
(l) ratites.
4. Risk-based surveillance (RBS) method

4.1 Criteria and Risk factors

4.1.1 Criteria and risk factors for virus introduction into poultry holdings due to direct or indirect exposure to wild birds in particular those of identified 'target species'

(max. 32000 chars):

(a) The location of the poultry holding in proximity to wet areas, ponds, swamps, lakes, rivers or sea shores where migratory wild water birds may gather.

(b) The location of the poultry holding in areas with a high density of migratory wild birds, in particular of those birds that are characterised as "target species" (TS) for HPAI H5N1 detection and listed in Part 2 of Annex II/E.C. Decision 2010/367.

(c) The location of poultry holding in proximity to resting and breeding places of migratory wild water birds, in particular where these areas are linked through migratory birds’ movements to areas where HPAI H5N1 is known to occur in wild birds or poultry.

(d) Poultry holdings with free range production, or poultry holdings where poultry or other captive birds are kept in the open-air in any premises in which contact with wild birds cannot be sufficiently prevented.

(e) Low biosecurity level in the poultry holding, including the method of storage of feed and the use of surface water.

4.1.2 Criteria and risk factors for virus spread within poultry holdings and between poultry holdings, as well as the consequences (impact) of the spread of avian influenza from poultry to poultry and between poultry holdings
Standard requirements for the submission of surveillance programmes for avian influenza

(version : 2.1)

(max. 32000 chars):

a) The presence of more than one poultry species in the same poultry holding, in particular the presence of domestic ducks and geese together with other poultry species.

(b) The location of the poultry holding in areas with high densities of poultry holdings.

(c) Trade patterns, including imports and related intensity of movements, both direct and indirect, of poultry and other factors including vehicles, equipment and persons.

(d) The presence of long lived poultry categories and multi-age groups of poultry on the holding (such as layers).

4.2. Targeting of populations at risk

(max. 32000 chars):

At the end of the last year, in conformity with the reportings from the county sanitary veterinary and food safety directions/from Bucharest, in Romania there are:

a) 269 commercial farms of broiler; in according to E.C. Decision 2010/367, the broilers from commercial farms should not be tested;  
b) 173 commercial holdings of laying hen;  
c) 44 commercial holdings of chicken breeder;  
d) 6 commercial holdings of fattening turkey; 

e) 2 commercial holdings of ratite;  
f) 6 commercial holdings of pheasant;  
g) 8 commercial holdings of quail;  
h) 717 risk areas („target” localities);  
i) 2 commercial holdings of palmiped.

4.3. Targeting of poultry holdings to be sampled
### Standard requirements for the submission of surveillance programmes for avian influenza

**version : 2.1**

Max. 32000 chars:

<table>
<thead>
<tr>
<th>Number of poultry holdings (except duck, goose and mallard holdings) to be sampled in each poultry production category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of holdings per poultry production category in Romania</td>
</tr>
<tr>
<td>Up to 34</td>
</tr>
<tr>
<td>35-50</td>
</tr>
<tr>
<td>51-80</td>
</tr>
<tr>
<td>81-250</td>
</tr>
<tr>
<td>&gt; 250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of duck, goose and mallard holdings to be sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of duck, goose and mallard holdings in Romania</td>
</tr>
<tr>
<td>Up to 46</td>
</tr>
<tr>
<td>47-60</td>
</tr>
<tr>
<td>61-100</td>
</tr>
<tr>
<td>101-350</td>
</tr>
<tr>
<td>&gt; 350</td>
</tr>
</tbody>
</table>
### 5. Poultry holdings to be sampled

#### 5.1 Poultry holdings (except ducks, geese and mallard) to be sampled according to table 1 of Annex 1 to Decision 2010/367/EU

<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>RO 1</td>
<td>91</td>
<td>43</td>
<td>50</td>
<td>4 300</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 2</td>
<td>31</td>
<td>17</td>
<td>50</td>
<td>1 700</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 3</td>
<td>27</td>
<td>17</td>
<td>50</td>
<td>1 700</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 4</td>
<td>24</td>
<td>14</td>
<td>50</td>
<td>1 400</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
</tbody>
</table>

| Total       | 173                      | 91                                    |                               | 9 100                                         |                               |

(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.
## Standard requirements for the submission of surveillance programmes for avian influenza

### 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>RO 1</td>
<td></td>
<td>14</td>
<td>10</td>
<td>50</td>
<td>1 000 Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 2</td>
<td></td>
<td>15</td>
<td>12</td>
<td>50</td>
<td>1 200 Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 3</td>
<td></td>
<td>14</td>
<td>13</td>
<td>50</td>
<td>1 300 Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 4</td>
<td></td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>100 Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>44</td>
<td>36</td>
<td>3 600</td>
<td></td>
</tr>
</tbody>
</table>

(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: fattening turkeys

<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>RO 1</td>
<td></td>
<td>6</td>
<td>6</td>
<td>50</td>
<td>600 Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>6</td>
<td>6</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>
Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

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

<table>
<thead>
<tr>
<th>Category</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>ratites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTS (2) (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RO 3</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>60 Haemagglutination-inhibition-test (HI)</td>
<td>X</td>
</tr>
<tr>
<td>RO 4</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>60 Haemagglutination-inhibition-test (HI)</td>
<td>X</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>2</td>
<td></td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Category</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>pheasants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTS (2) (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RO 2</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>60 Haemagglutination-inhibition-test (HI)</td>
<td>X</td>
</tr>
<tr>
<td>RO 3</td>
<td>3</td>
<td>3</td>
<td>30</td>
<td>180 Haemagglutination-inhibition-test (HI)</td>
<td>X</td>
</tr>
</tbody>
</table>
### Standard requirements for the submission of surveillance programmes for avian influenza

**version : 2.1**

<table>
<thead>
<tr>
<th>RO 4</th>
<th>2</th>
<th>2</th>
<th>30</th>
<th>120</th>
<th>Haemagglutination-inhibition-test (HI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>6</td>
<td>6</td>
<td></td>
<td>360</td>
<td></td>
</tr>
</tbody>
</table>

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

#### Category : Quails

<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>RO 2</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>60</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 3</td>
<td>6</td>
<td>6</td>
<td>30</td>
<td>360</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 4</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>60</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8</td>
<td>8</td>
<td></td>
<td>480</td>
<td></td>
</tr>
</tbody>
</table>

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

#### Category : backyard flocks gallinacee
### Standard requirements for the submission of surveillance programmes for avian influenza

**version : 2.1**

<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>RO 1</td>
<td>103</td>
<td>38</td>
<td>25</td>
<td>1 900</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 2</td>
<td>250</td>
<td>130</td>
<td>25</td>
<td>7 150</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 3</td>
<td>206</td>
<td>99</td>
<td>25</td>
<td>4 800</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>RO 4</td>
<td>158</td>
<td>69</td>
<td>25</td>
<td>3 450</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>717</strong></td>
<td><strong>336</strong></td>
<td></td>
<td><strong>17 300</strong></td>
<td></td>
</tr>
</tbody>
</table>

(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 :**  
backyard flocks palimpedes

**Add a new row**

**delete this category**
### 5.2 Ducks, geese and mallard holdings to be sampled according to table 2 of Annex I to Decision 2010/367/EU

<table>
<thead>
<tr>
<th>NUTS (2) (a)</th>
<th>Total number of duck and goose holdings</th>
<th>Total number of duck and goose 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>RO 1</td>
<td>6</td>
<td>6</td>
<td>50</td>
<td>600</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
<td></td>
<td><strong>600</strong></td>
<td></td>
</tr>
</tbody>
</table>

(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.

---

### 5.2 Ducks, geese and mallard holdings to be sampled according to table 2 of Annex I to Decision 2010/367/EU

<table>
<thead>
<tr>
<th>Method of laboratory analysis</th>
<th>Total number of tests to be performed per method</th>
<th>Number of samples per holding</th>
<th>Total number of duck and goose holdings to be sampled</th>
<th>Total number of duck and goose holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haemagglutination-inhibition-test (HI)</td>
<td>600</td>
<td>50</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

(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.
6. Frequency and period for testing

The sample will be harvested in the seasonal production, for the commercial farms, and during the entire year, for backyards. However, where appropriate, sampling can be adapted to other identified periods at local level, during which time the presence of other poultry hosts on a holding might pose a greater risk for disease introduction (e.g. in the Danube Delta area, along Danube River and in the neighbourhood of pools and lakes that are biotope for wild birds. Surveillance will be obligatory extended to backyards flocks, their number being significant for Romania.

7. Laboratory testing

Description of the used serological tests: (max 32000 chars)

1. Laboratory tests will be carried out in accordance with the avian influenza diagnostic manual (Commission Decision 2006/437/EC) laying down the procedures for the confirmation and differential diagnosis of avian influenza (including examination of sera from ducks and geese) and according to Commission Decision 2010/367/EC.
2. Haemagglutination-inhibition (HI) tests for H5 and H7 samples will be carried out at the Institute for Diagnosis and Animal Health, National Reference Laboratory for avian influenza and Newcastle Disease (NRL) in Romania and at county sanitary veterinary and food safety laboratories and Bucharest sanitary veterinary and food safety laboratory under the control of the NRL;
3. All positive serological findings will be confirmed by the National Reference Laboratory for avian influenza and Newcastle Disease (Institute for Diagnosys and Animal Health), using designated strains supplied by the Community Reference Laboratory for Avian Influenza and Newcastle Disease:
8. Description of the surveillance programme in wild birds

8.1 Objectives of surveillance

The objective of the surveillance programme for avian influenza in wild birds is 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.

8.2 Surveillance design

(a) A risk-based surveillance (RBS) shall be implemented as a "passive" surveillance system by laboratory investigation of moribund wild birds or birds found dead and it shall be 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" (TS), shall be specifically targeted.
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, shall be targeted.

Close cooperation with epidemiologists and ornithologists and the competent authority for nature conservation shall be ensured in the preparation of the surveillance programme, assisting in species identification and optimising sampling adapted to the national situation.

If the epidemiological situation for the HPAI H5N1 virus so requires, surveillance activities shall be enhanced by awareness raising and active searching and monitoring for dead or moribund wild birds, in particular for those belonging to TS.

c) that come in direct contact with the poultry holdings.

### 8.3 Sampling procedures

Sampling procedures shall be carried out in accordance with the Diagnostic Manual.

Cloacal and tracheal/oropharyngeal swabs and/or tissues from wild birds found dead or moribund shall be sampled for molecular detection (PCR) and/or virus isolation.

Specific care must be taken for the storage and transport of samples in accordance with paragraphs 5 and 6 of Chapter IV of the Diagnostic Manual. All avian influenza virus isolates of cases in wild birds shall be submitted to the EURL, unless a derogation has been granted as provided for in paragraph 4(d) of Chapter V of the Diagnostic Manual. Viruses of the H5/H7 subtype shall be submitted to the EURL without delay and shall be subjected to the standard characterisation tests (nucleotide sequencing/IVPI) according to the Diagnostic Manual.

Sampling shall not extend beyond 31 December of the year of implementation of the surveillance programme.
8.4 Laboratory testing

Laboratory tests shall be carried out in accordance with the Diagnostic Manual. Testing of samples shall be carried out at National Laboratories for avian influenza (NL) in Romania and at county sanitary veterinary and food safety laboratories and Bucharest sanitary veterinary and food safety laboratory under the control of the NRL.

- All results will be sent to the Community Reference Laboratory for Avian Influenza (CRL) for collation. A good flow of information must be ensured. The CRL shall provide technical support and keep an enlarged stock of diagnostic reagents. Antigens for use in the surveillance shall be supplied to NLs by the CRL to ensure uniformity.

- All avian influenza virus isolates of cases in wild birds shall be submitted to the CRL in accordance with Community legislation, unless a derogation according to paragraph 4 of Chapter V under Differential diagnosis in the avian influenza Diagnostic Manual laid down in Decision 2006/437/EC is granted. Viruses of H5/H7 subtype shall be submitted without delay and shall be subjected to the standard characterisation tests (nucleotide sequencing/IVPI) according to the said diagnostic manual.

The serological surveillance is not used in Romania for the surveillance of AI in wild birds.

Virological tests:

a. RT – PCR

The method is based on the amplification and identification of a genetic fragment of matrix proteine, the common fragment for all viruses subtype A of A.I.

b. Virus isolation by the inoculation of embryonated specific pathogen free (SPF) eggs (only for positive samples at PCR).

8.5 WILD BIRDS - Investigation according to the surveillance programme for avian influenza in wild birds set out in Annex II to Decision 2010/367/EU
9. **Description of the epidemiological situation of the disease in poultry during the last five years**

**max 32000 chars:**

The first highly pathogenic Avian Influenza case H5N1 was diagnosed in Romania on 7-th of October 2005 (first time was declared in 1941) at poultry in backyards, in a very exposed at risk area, in Danube Delta. During the winter of 2005-2006 (October – April), the disease extended at 53 outbreaks in nine counties from the South-East area of the country.

After a short period of peacetime, highly pathogenic A.I. H5N1 evolved during May - July 2006, in 5 commercial holdings of Brasov County: SC DRAKOM SILVA SRL, SC PATI-PROD SRL- farm no.3, SC PATI-PROD SRL – turkey farm, SC AVIPROD 2002 Ploiesti, SC PATI-PROD SRL farm no. 5., and 122 backyards from 18 counties located in the Centre and East of the country, and in Bucharest City.

During November-December 2007, in Murighiol a town of Tulcea county, was confirmed an outbreak of highly pathogenic A.I. H5N1 in gallinaceae and palimpedes from a non-commercial holding. Measures have been instituted by the European Commission under the Commission Decision 2007/770/CEE. On 07.02.2009, Community Reference Laboratory confirmed a case of H5N3 low pathogenic AI, in 19 sentinel poultry, placed by Tulcea Sanitary Veterinary and Food Safety Directorate in wild environment of the Danube Delta - Condura channel.

---

<table>
<thead>
<tr>
<th>NUTS (2) code/region (a)</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>RO 1</td>
<td>345</td>
<td>345</td>
<td>690</td>
<td>120</td>
</tr>
<tr>
<td>RO 2</td>
<td>790</td>
<td>790</td>
<td>1580</td>
<td>210</td>
</tr>
<tr>
<td>RO 3</td>
<td>320</td>
<td>320</td>
<td>640</td>
<td>110</td>
</tr>
<tr>
<td>RO 4</td>
<td>210</td>
<td>210</td>
<td>420</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 665</strong></td>
<td><strong>3 330</strong></td>
<td><strong>560</strong></td>
<td></td>
</tr>
</tbody>
</table>

(a) Refers to the place of collection of birds/samples. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) cannot be used, region as defined in the programme by the Member State is requested. Please fill-in these values directly in the field.
In the first quarter of 2010, in Tulcea County, there were confirmed two outbreaks of Highly pathogenic AI H5N1 in the poultry reared in backyards. The first outbreak was confirmed on March 15, in the hens of the backyards located in Letea communality. The case was notified to the European Commission and the OIE Restrictive measures were imposed by the European Commission in accordance with Commission Decision 2010/158/UE. The second outbreak was confirmed on March 27, in the hens raised in backyards in Plauru - village located in Area B of the first outbreak. Restrictive measures were imposed by the European Commission in accordance with Commission Decision 2010/218/UE.

The outbreak occurred in 20 isolated geese which were the property of Babes - Bolyai University and were brought as sentinel birds to Cot Candura location in August 2010 for avian influenza research. This location is isolated, it is surrounded by lakes Fortuna, Balcanestii Mari, Papadia, Rotelciuc and water channel Sontea Noua and Veche.

Tracheal swabs, cloacal swabs and serological samples were taken on 10 August, 24 September, 29 October and 5 November 2010. On the samples collected on 29 October and 5 November, the RT-PCR test results were positive in tracheal swabs and cloacal swabs; the serological results were negative. On 3 November 2010, Tulcea Sanitary Veterinary and Food Safety Directorate submitted a disease suspicion notification report. According to the procedure, Tulcea Sanitary Veterinary and Food Safety Laboratory submitted to the National Reference Laboratory for avian influenza 20 samples for confirmation/invalidation of the avian influenza suspicion. A positive RT-PCR result for H5 subtype was obtained completed with the result of the virological examination on 12 November 2010: the hæmagglutination inhibition and positive neuraminidase inhibition reactions for H5 and N3 subtypes. The date of confirmation is 12 November 2010, as during this period (3 to 12 November 2010) the virus isolation and its characterization as being low pathogenic were carried out.

### 9.1 Measures included in the programme for surveillance in poultry

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

The central authority in charge with the supervising and coordinating the departments implementing the programme is the National Sanitary Veterinary...
9.1.2  System in place for the registration of holdings

(max. 32000 chars):

Poultry commercial holdings are registered and sanitary veterinary approved in order to be able to operate. The legal framework for carrying out commercial activity with poultry and poultry products is represented by:

- Council Directive 2009/158/EC on animal health conditions governing intra-Community trade in, and imports from third countries of poultry and hatching eggs;
- The Order of the President of the National Sanitary Veterinary and Food Safety Authority no. 16/2010 for approving the sanitary and veterinary norm on the sanitary- veterinary registration / authorization of the units / collection centers / farms of origin and of the means of transport in the field of health and animal welfare, of the establishments involved in the storage and neutralization of animal by-products not intended for human consumption and of processed products.

In order to be sanitary veterinary approved, poultry holdings shall satisfy, in accordance with the legislation in force, the following conditions:

- appropriate facilities and operation;
- application of the “Program of surveillance, prevention and animal disease control, of the diseases transmissible from animals to humans, animal protection and environment protection” approved by Order of the National Sanitary Veterinary and Food Safety Authority President;
- at least one inspection visit per year by the official veterinarian;
- additional checks to verify the compliance of the establishment with the hygiene measures and the operation of the establishments.
9.1.3 Data on vaccination carried out

In Romania, it is not carried out the vaccination of birds against Avian Influenza.

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

During 2005-2010, the highly pathogenic A.I. H5N1 virus was isolated in wild life from 24 wild birds: 14 swans, 4 wild geese, 1 water hen, 1 wild pigeon, 2 coots, 1 heron and 1 owl.

10.1 Measures included in the programme for surveillance in wild birds

Sampling must consider the seasonality of migration patterns, which may vary in different areas. It shall take into account the behaviour of bird species as
regards migratory flyways, main habitats, gregariousness and degree of mixing during migration and the results obtained from previous surveillance. For H5N1 HPAI, all those factors shall be considered in relation to the probability of wild bird exposure to infected poultry and wild birds in outbreak areas and the probability of contact of wild birds with domestic poultry, especially the “higher risk” species. Liaisons with bird conservation/watching institutions and ringing stations shall be encouraged. Sampling, where appropriate, shall be carried out under the supervision of staff from these groups/stations, by hunters and other ornithological skilled persons.

1. Passive surveillance of wild birds shall be targeted on:
   a) areas where increased incidence of morbidity and mortality in wild birds occurs;
   b) areas close to the Black Sea, the Danube river, lakes, rivers and waterways which constitute biotopes for wild birds;
   c) areas in close proximity with poultry holdings where live the wild birds;
   d) birds belonging to identified “higher risk” species and which may come into contact with both poultry and wild birds.

2. Active surveillance on living and clinically healthy and/or clinically diseased, injured or hunted birds shall be targeted on:
   a) migratory birds belonging to the order of Anseriformes (water fowl) and Charidriiformes (shorebirds and gulls);
   b) at identified areas for concentration and mixing of high number of migratory birds involving different species and in particular when these areas are in proximity to domestic poultry farms;
   c) a selection of higher risk species.

3. Moreover, the investigations of live and dead wild birds shall be focussed on the birds:
   a) in the areas where cases of HPAI H5N1 were identified at wild birds and poultry;
   b) in the areas epidemiologically related to these cases.

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

32max. 32000 chars) :

The central authority in charge with the supervising and coordinating the departments implementing the programme is the National Sanitary Veterinary and Food Safety Authority. The programme for the surveillance of Avian Influenza in poultry and wild birds is drawn up at the Sanitary Veterinary General...
Directorate, based on the data regarding the risk analysis sent by the county and Bucharest municipality sanitary veterinary and food safety directorates

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

(max. 32000 chars):

The programme will be applied on the entire territory of Romania, taking account of the high risk areas.

10.1.3 Estimation of the local and/or migratory wildlife population

(max. 32000 chars):

It cannot estimate the flock of migratory birds, but it can confirm that, in Romania, in the Danube Delta there are three migration tracks, creating a favorable biotope for wild birds, especially the water birds. The temperate climate in Romania is favourable to the migration of wild birds in a large number. Within the local flock of bird species, there are usually found out species typical of temperate climate, in particular: sparrow, pigeon, ring dove, red-throated diver, loon, duck, red crow, black crow, hooded crow, moor hen, wild duck etc.

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

(max. 32000 chars):

The A.I. notification shall be carried out in accordance with the Council Directive 1982/894/CEE, amended through Commission Decision 2004/216/CE,
Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

transposed into Romanian legislation through President NSVFSA Order no. 79/2008.
The suspicion/confirmation of A.I. shall notify the European Commission by the Animal Disease Notification System (ADNS) and the OIE, through WAHIS.

12. Costs

12.1 Detailed analysis of the costs

12.1.1 Poultry

(max. 32000 chars):

<table>
<thead>
<tr>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DETAILED ANALYSIS OF THE COSTS:</td>
</tr>
<tr>
<td>A.1). SEROLOGICAL SURVEILLANCE IN POULTRY</td>
</tr>
<tr>
<td>Haemagglutination and haemagglutination inhibition tests in poultry</td>
</tr>
<tr>
<td>a. COMMERCIAL HOLDINGS</td>
</tr>
<tr>
<td>Laying hens:</td>
</tr>
<tr>
<td>4550 samples x 0,5 euro = 2275 euro</td>
</tr>
<tr>
<td>9 100 tests x 12 euro = 109 200 euro</td>
</tr>
<tr>
<td>Chicken breeders:</td>
</tr>
<tr>
<td>1800 samples x 0,5 euro = 900 euro</td>
</tr>
<tr>
<td>3600 tests x 12 euro = 43 200 euro</td>
</tr>
<tr>
<td>Turkey:</td>
</tr>
<tr>
<td>300 samples x 0,5 euro = 150 euro</td>
</tr>
<tr>
<td>600 tests x 12 euro = 7 200 euro</td>
</tr>
</tbody>
</table>
Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

Pheasants, quails and ratites:
480 samples x 0,5 euro = 240 euro
960 tests x 12 euro = 11 520 euro

Gees and ducks:
100 samples x 0,5 euro = 50 euro
200 tests x 12 euro = 2 400 euro

TOTAL COMMERCIAL HOLDINGS:
7230 samples x 0,5 euro = 3615 euro
14 460 tests x 12 euro/test = 173 520 euro

b. NONCOMMERCIAL HOLDINGS (backyards)
Gallinaceae (poultry):
8600 samples x 0,5 euro = 4300 euro
17 300 tests x 12 euro = 207 600 euro

Geese and ducks:
8600 samples x 0,5 euro = 4300 euro
17 300 tests x 12 euro = 207 600 euro

TOTAL NON COMMERCIAL HOLDINGS:
17 200 samples x 0,5 euro = 8600 euro
34 600 tests x 12 euro/test = 415 200 euro

TOTAL TESTS SEROLOGICAL SURVEILLANCE = 49 060 from which:
TOTAL TESTS- POULTRY IN COMMERCIAL HOLDINGS = 14 460
TOTAL TESTS – POULTRY IN NONCOMMERCIAL HOLDINGS = 34 600

A 2). VIRUSOLOGICAL SURVEILLANCE IN POULTRY
  a. COMMERCIAL HOLDINGS
    RT-PCR test 50 x 20 euro = 1000 euro
    Virus isolation = 50 x 40 euro = 2000 euro
  b. NONCOMMERCIAL HOLDINGS (backyards)
    RT-PCR test 100 x 20 euro = 2000 euro
### Virus isolation

- **50 x 40 euro = 2000 euro**

---

**TOTAL TESTS VIROLOGICAL SURVEILLANCE = 250 from which:**
- **TOTAL TESTS - POULTRY IN COMMERCIAL HOLDINGS = 100**
- **TOTAL TESTS – POULTRY IN NONCOMMERCIAL HOLDINGS = 150**

**TOTAL COSTS SEROLOGICAL AND VIROLOGICAL SURVEILLANCE POULTRY = 607 935 euro from which:**
- **SAMPLING POULTRY 24 430 X 0,5 euro = 12 215 euro**
- **SEROLOGICAL SURVEILLANCE:**
  - **HAEMAGGLUTINATION AND HAEMAGGLUTINATION INHIBITION TESTS = 588 720 euro**
  - **VIROLOGICAL SURVEILLANCE:**
    - **RT-PCR test and virus isolation= 7000 euro**

---

### 12.1.2 Wild birds

**VIROLOGICAL SURVEILLANCE IN WILD BIRDS**

- **SAMPLING WILD BIRDS  1665 x 5 euro = 8325 euro**
- **RT-PCR test  = 3880 x 20 euro =  77 600 euro**
- **Virus isolation  =  30 x 40 Euro = 1200 euro**

**TOTAL COSTS SURVEILLANCE WILD BIRDS = 87 125 euro**

**TOTAL COSTS SURVEILLANCE POULTRY AND WILD BIRDS/2012 = 695 060 euro**
**TOTAL COSTS SURVEILLANCE POULTRY AND WILD BIRDS FOR 2012 = 695 060 euro**
### 12.2 Summary of the costs

#### 12.2.1 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</td>
<td>24</td>
<td>12</td>
<td>294,360</td>
</tr>
<tr>
<td>Haemagglutination-inhibition-test (H7) for H7</td>
<td>24</td>
<td>12</td>
<td>294,360</td>
</tr>
<tr>
<td>Virus isolation test</td>
<td>100</td>
<td>40</td>
<td>4000</td>
</tr>
<tr>
<td>PCR test</td>
<td>150</td>
<td>20</td>
<td>3000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49 310</strong></td>
<td></td>
<td><strong>595,720,00 €</strong></td>
</tr>
</tbody>
</table>

**Other measures to be covered**

<table>
<thead>
<tr>
<th>Sampling</th>
<th>24 430</th>
<th>0.5</th>
<th>12 215</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td></td>
<td><strong>12 215,00 €</strong></td>
</tr>
</tbody>
</table>
### 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 (HI) for H5/H7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Virus isolation test</td>
<td>30</td>
<td>40</td>
<td>1200</td>
</tr>
<tr>
<td>PCR test</td>
<td>3880</td>
<td>20</td>
<td>77600</td>
</tr>
<tr>
<td>Other please specify here - sampling</td>
<td>1665</td>
<td>5</td>
<td>8325</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3910</td>
<td><strong>60,00 €</strong></td>
<td><strong>87 125,00 €</strong></td>
</tr>
</tbody>
</table>

**Other measures to be covered**

- **Sampling**
  - 0
  - 0
  - 0

**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: .zip, .jpg, .jpeg, .tiff, .tif, .xls, .doc, .bmp, .pna.
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!
5) Zip files cannot be opened (by clicking on the Open button). All other file formats can be opened.