



**EUROPEAN COMMISSION**  
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

**SANCO/10344/2009**

*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 2010 by Commission Decision 2009/883/EC**

**Finland**

\* in accordance with Council Decision 2009/470/EC

## ANNEX

### 1. Identification of the programme

Member State: Finland

Disease: Avian Influenza

Year of implementation: 2010

Reference of this document: 2008/425/EC

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### 2. Description of the surveillance programme in poultry

#### 2.1. Objectives, general requirements

The objectives and general requirements shall be those described in the commission decision on the implementation of surveillance programmes for avian influenza in poultry and wild birds to be carried out in the Member States and amending Decision 2004/450/EC (2007/268/EC).

The poultry business in Finland is concentrated in the province of Western Finland. However, the aim is to include farms also from other parts of the country. The latest available numbers of farms from IACS (Integrated Administration and Control System) are used for calculations.

#### 2.2. Design and implementation

The total number of holdings to be sampled in Finland in 2010 for avian influenza will be 217. The total number of samples to be taken from these farms will be 2420 - 3255 depending on the number of sheds per farm at the time of sampling.

- 60 holdings with laying hens (annex I)
- 42 holdings with chicken breeders (annex II)
- 35 holdings with free range hens for organic production (annex III)
- 47 holdings with turkey (annex IV)
- 9 holdings with ducks and/or geese (annex V)
- 18 holdings with farmed feathered game (annex VI)
- 6 holdings with ostriches (annex VII)

##### **2.2.1. Gallus gallus**

Broiler production flocks are excluded from the survey due to their short life span.

There are 589 layer hen farms with more than 100 hens in the IACS data. There are 58 breeding flocks (chicken breeders) and 35 flocks with free range hens for organic production.

#### Sampling design and types of production

In total 60 farms with laying hens will be randomly selected from the register.

Of the 58 breeding farms, 42 will be randomly selected.

Of the 35 holdings with free range hens for organic production, all are included in the survey.

#### Number of samples

The average size of the selected farms is 4800 hens. Five samples from each shed and 10 samples per farm as a minimum will be collected to ensure 95 % probability of identifying at least one positive bird if the prevalence of seropositive birds is  $\geq 30\%$ .

### **2.2.2. Turkeys**

#### Sampling design and types of production

The total number of commercial turkey holdings including both breeders and producers is 55. From these farms, 47 will be randomly selected but taking into consideration their geographical distribution (Annex IV). There are no organic production type turkey farms in Finland.

#### Number of samples

The average size of turkey farms is 6000 birds. Five samples from each shed and 10 samples as a minimum per farm will be collected to ensure 99 % probability of identifying at least one positive bird if the prevalence of seropositive birds is  $\geq 5\%$ .

### **2.2.3. Ducks (incl. mallards) and geese**

There are 6 farms with at least 50 ducks and 3 farms with at least 50 geese in Finland. All of these will be included in the survey.

### **2.2.4. Pheasants**

There are 18 farms with pheasants in the IACS data. All of these will be included in the survey.

### **2.2.5. Ratites**

There are no large-scale (> 100 animals) ostrich or emu farms in Finland. There are 6 farms with at least 10 ostriches in Finland according to the IACS data. These farms will be included in the survey by sampling ostriches at slaughter.

### **2.2.6. Other types of poultry**

the number of quail, guinea fowl and feathered game farms is not significant in Finland.

### **2.3. Laboratory testing**

The surveillance in poultry shall be carried out by haemagglutination-inhibition (HI) test for H5 and H7 in accordance with the diagnostic manual.

The laboratory responsible for the testing is the Finnish Food Safety Authority Evira.

## **3. Description of the surveillance programme in wild birds**

### **3.1. Objectives, general requirements and criteria**

The objectives and general requirements shall be those described in the Commission Decision 2007/268/EY on the implementation of surveillance programmes for avian influenza in poultry and wild birds to be carried out in the Member States and amending Decision 2004/450/EC.

### **3.2 Design and implementation**

The numbers of wild birds to be sampled in Finland in 2010 for avian influenza will be 300 birds in active sampling and 100 birds in passive sampling. The numbers and areas can be found in Annex VIII.

#### **3.2.1. Active surveillance**

Finland will mostly utilise the help of volunteered hunters during autumn 2010 and also experts from the bird conservation/watching institutions and ringing stations during spring and autumn 2010 to collect cloacal swabs/ fresh faeces and oropharyngeal samples from newly hunted or captured wild birds, as in previous years.

Wild bird sampling will be focused on waterfowls (mainly ducks / mallards), waders and seagulls. Sampling will be focused on certain sites at coastline during spring and autumn migration which comprises also the risk group for avian influenza. Some samples will be taken inlands and during summer.

The Finnish Food Safety Authority will pay 6 EUR per bird to the voluntary persons taking these samples.

The anticipated number of active sampling is 600 samples from 300 birds.

#### **3.2.2. Passive surveillance**

The Fish and Wildlife Health Unit of Evira in the city of Oulu takes samples for AI testing from individual autopsied wild birds when needed. In addition, instructions for estimating the need for sampling for AI in mass deaths of wild birds have been sent to the provincial veterinary officers as well as other parties. At least cloacal swabs and oropharyngeal samples as well as organ samples will be taken from these birds and sent to Evira (Helsinki) for virological investigation.

The anticipated number of wild bird passive surveillance samples is 200 samples from 100 birds.

### **3.3. Laboratory testing: description of the laboratory tests used**

The virological surveillance in wild birds will be carried out individually by M-gene PCR in accordance with the diagnostic manual. In case of a positive finding H5 PCR

and analysis of the cleavage site are undertaken. Virus isolation may be needed in some cases.

The laboratory responsible for the testing is the Finnish Food Safety Authority Evira.

#### **4. Description of the epidemiological situation of the disease in poultry during the last five years.**

##### **4.1. Measures included in the programme for poultry surveillance**

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

The Finnish Food Safety Authority Evira is responsible for the implementation of the avian influenza surveillance programme for poultry in Finland.

###### 4.1.2. System in place for the registration of holdings

There is a central register for rural business in Finland which is held by the Information Centre of the Ministry of Agriculture and Forestry. In this register system there are separate subregisters such as a register for holdings keeping laying hens and producing eggs for commercial purposes and required to label the eggs in accordance with the EU directive 1999/74/EC. Only small holdings selling eggs directly to consumers or situated in certain remote areas are exempted from this labelling requirement and are not all registered centrally.

Also poultry holdings receiving financial support such as all broiler flocks and most turkey flocks are registered for financial support and control purposes.

Information on the number of back-yard flocks, free-range organic farms and holdings keeping other species of poultry, such as farmed feathered game, ducks and geese or ostriches has to be compiled from different registers and their reliability can therefore not be ensured.

###### 4.1.3. Data on vaccination

The use of avian influenza vaccine is prohibited in Finland.

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

##### **5.1. Measures included in the wild bird surveillance programme**

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

the Finnish Food Safety Authority Evira is responsible for the implementation of the avian influenza surveillance programme for wild birds in Finland.

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

For passive surveillance it is difficult to anticipate where the dead birds are found. However, taking into consideration passive surveillance in recent years it is likely that

these samples will mostly come from coastal areas especially in Uusimaa (FI 181) and Oulu (FI 1A2).

### 5.1.3. Estimation of the local and/or migratory wild bird population

The estimated number of migratory wild bird population in Finland is 80 million birds and the local population 20 million birds.

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

Avian influenza is a compulsorily notifiable disease in Finland according to the Act on animal diseases (55/1980). Avian influenza virus subtypes H5 have never been detected in poultry in Finland. Only low pathogenic strains of the virus have been detected in some wild birds.

## **7. Costs**

### 7.1. Detailed analysis of the costs

#### **7.1.1. Poultry**

As the number of samples to be taken will depend on the number of sheds per farm, the maximum numbers of samples described in the relevant annexes I-VII will be used for the calculation of the financial costs. No costs of the sampling have been included as they have not been reimbursed by the EU in the past.

laying hens	900 samples	1800 tests (H5+H7)
chicken breeders	630 samples	1260 tests
organic hens	350 samples	700 tests
turkeys	705 samples	1410 tests
ducks and geese	450 samples	900 tests
pheasants etc.	180 samples	360 tests
ostriches	60 samples	120 tests
<b>Total</b>	<b>3275 samples</b>	<b>6550 tests</b>

The unit cost of 4,50 € per HI-test (H5/H7) was used for the assessment of the total costs. The assessment was based on the calculations carried out for the year 2008 (annex X, see original application).

In addition, there is a small reservation for two false positive holdings (by HI-test) where additional sampling of 40 samples from each holding must be carried out and the samples examined by PCR and virus isolation. The samples would be pooled (five in each pool).

#### **7.1.2. Wild birds**

A total of 300 birds (600 samples) in active surveillance and 100 birds (200 samples) in passive surveillance will be examined. Cloacal swabs and oropharyngeal swabs

will be taken from each bird. The total number of tests will thus be 800. An estimation of 30 additional confirmatory tests is estimated to be carried out with both H5 and H7 PCR. This adds up to 860 tests.

An estimation of 30 samples will be put to virus isolation. The unit cost of 47,00 € per isolation was used for the assessment of the total costs for the examination. The number was based on the calculations carried out for the year 2008 (annex X).

The unit cost of 20,35 € per PCR-test was used for the assessment of the total costs for the examination. The number was based on the calculations carried out for the year 2008 (annex X).

## **7.2. Summary of the costs**

### **7.2.1. Poultry surveillance**

The total cost for the examination of the samples of poultry is assessed to be 32.169,00 €. The table of summary of the costs of the poultry surveillance is in Annex IX.

### **7.2.2. Wild bird surveillance**

The estimated cost of the wild bird survey programme is 17.501 € for PCR testing and 1410,00 € for virus isolation (47,00 € per test), and 1800,00€ for sampling which adds up to 20.711,00 €.

## ANNEX I

**Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLED****Laying hens**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	40	4	10-15		HI
FI 18	328	32	10-15		HI
FI 19	206	21	10-15		HI
FI 1A	14	2	10-15		HI
FI 20	1	1	10-15		HI
<b>Total</b>	<b>589</b>	<b>60</b>	<b>600-900</b>	<b>1200-1800</b>	



## ANNEX II

**Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLED****Chicken breeders**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	-	-	-		HI
FI 18	24	17	10-15		HI
FI 19	34	25	10-15		HI
FI 1A	-	-	-		HI
FI 20	-	-	-		HI
Total	58	42	420-630	840-1260	

## ANNEX III

**Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLED****Organic hens**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	8	8	10		HI
FI 18	11	11	10		HI
FI 19	14	12	10		HI
FI 1A	2	2	10		HI
FI 20	-	-	-		HI
<b>Total</b>	<b>35</b>	<b>35</b>	<b>350</b>	<b>700</b>	

## ANNEX IV

**Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLED****Turkeys**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	2	1	10-15		HI
FI 18	15	13	10-15		HI
FI 19	38	33	10-15		HI
FI 1A	-	-	-		HI
FI 20	-	-	-		HI
Total	55	47	470-705	940-1410	

## ANNEX V

Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLEDDucks and geese

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	7	7	40-50		HI
FI 18	2	2	40-50		HI
FI 19	-	-	-		
FI 1A	-	-	-		
FI 20	-	-	-		
<b>Total</b>	<b>9</b>	<b>9</b>	<b>360-450</b>	<b>720-900</b>	

## ANNEX VI

**Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLED****Farmed feathered game**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	5	5	10		HI
FI 18	9	9	10		HI
FI 19	3	3	10		HI
FI 1A	1	1	10		HI
FI 20	-	-	-		
Total	18	18	180	360	

## ANNEX VII

**Table 2.2.1 POULTRY HOLDINGS TO BE SAMPLED****Ostriches**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
FI 13	2	2	10		HI
FI 18	1	1	10		HI
FI 19	3	3	10		HI
FI 1A	-	-			
FI 20					
Total	6	6	60	120	

## ANNEX VIII

**Table 3.2.1 WILD BIRDS – investigation according to the surveillance programme for avian influenza**

NUT (2) code	Wild birds to be sampled	Total number of birds to be sampled	Estimated total number of samples to be taken for active surveillance	Estimated total number of samples to be taken for passive surveillance
FI 13	ducks, geese, waders, seagulls	80	60	20
FI 18	ducks, geese	90	50	40
FI 19	ducks, geese	120	100	20
FI 1A	geese, seagulls	60	45	15
FI 20	ducks, waders, geese	50	45	5
Total		400	300	100

## ANNEX IX

## Summary of the costs, surveillance in poultry

Measures eligible for co-financing surveillance in poultry			
Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method)	Total cost
Serological pre-screening			
Haemagglutination-inhibition-test (HI) for H5/H7	3275*2=6550	4,50 €	29475 €
Virus isolation test	40	47,00 €	1880 €
PCR test	40	20,35€	814,00€
<b>Other measures to be covered</b>	<b>Specify activities</b>		
Sampling			
Others			
<b>Total</b>			<b>32169,00€</b>



## ANNEX X

## Summary of the costs, surveillance in wild birds

<b>Measures eligible for co-financing surveillance in poultry</b>			
<b>Methods of laboratory analysis</b>	<b>Number of tests to perform per method</b>	<b>Unitary test cost (per method)</b>	<b>Total cost</b>
Serological pre-screening			
Haemagglutination-inhibition-test (HI) for H5/H7			
Virus isolation test	30	47,00 €	1410,00€
PCR test	860	20,35€	17501,00€
<b>Other measures to be covered</b>	<b>Specify activities</b>		
Sampling	300	6 €	1800 €
Others			
<b>Total</b>			<b>20711,00€</b>



**Central Agricultural Office  
Animal Health and Animal Welfare Directorate**

**HUNGARY**

**Application**

**for Community financing for the national control programme  
of Hungary for**

**Avian Influenza**

**for the year 2010.**

**30<sup>th</sup> of April, 2009**

## **1. Identification of the programme**

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Member State: **Hungary**

Disease: **Avian Influenza**

Year of implementation: **2010**

Reference of this document: **2007/268/EC: Commission Decision of 13 April 2007 on the implementation of surveillance programmes for avian influenza in poultry and wild birds to be carried out in the Member States and amending Decision 2004/450/EC 02/1888/2008.**

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Date sent to the Commission: **30<sup>th</sup> of April, 2009**

## **2. Description of the surveillance programme in poultry**

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### **2.1 Objectives, general requirements and criteria**

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#### **2.1.1 Timeframe and Reporting**

Sampling will be started at the beginning of the year 2010 and shall be finished by the end of 2010. (The survey shall be completed by the 31<sup>st</sup> of December, 2010.)

The final report of the survey will be submitted to the Commission and the CRI. until 31<sup>st</sup> of March, 2011 at the latest.

A monthly report containing all positive results found during the survey will be provided to the Commission by the Animal Health and Animal Welfare Directorate of the Central Agricultural Office by the end of each month.

#### **2.1.2 Laboratories involved:**

All samples will be tested by the National Reference Laboratory for Avian Influenza (NRI), no other laboratory will be involved.

National Reference Laboratory for Avian Influenza (NRI):

Name: Veterinary Diagnostic Directorate of the Central Agricultural Office  
Állategészségügyi Diagnosztikai Igazgatóság  
Address: 1149 Budapest, Tábormok u. 2., Hungary  
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## **2.2 Design and implementation**

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### **2.2.1 Selection of the holdings to be sampled**

In order to get relevant data, the number of holdings of the different poultry categories were actualised before having calculated the number of holdings to be sampled. Some counties with very low population of a given poultry category (or with absence of it) are excluded from the programme (regarding that category of poultry).

#### **Poultry categories to be sampled**

The poultry holdings to be sampled (except ducks and geese) are indicated in Table 2.2.1.1 – Table 2.2.1.8. The duck and goose holdings to be sampled are indicated in Table 2.2.2.:

Table 2.2.1.1: Holdings of laying hens

Table 2.2.1.2: Holdings of free range laying hens

Table 2.2.1.3: Chicken breeder holdings

Table 2.2.1.4: Fattening turkey holdings

Table 2.2.1.5: Turkey breeder holdings

Table 2.2.1.6: Ratite holdings (emus, ostriches)

Table 2.2.1.7: Holdings of farmed feathered game (pheasants, partridges, mallards)

Table 2.2.1.8: Holdings of “backyard flocks”

Table 2.2.2: Duck and goose holdings

(see tables on the following pages)

**Table 2.2.1.1 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of LAYING HENS**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	60	10	10	100	HI
HU21	54	10	10	100	HI
HU22	61	9	10	90	HI
HU23	35	4	10	40	HI
HU31	55	9	10	90	HI
HU32	58	8	10	80	HI
HU33	190	10	10	100	HI
<b>TOTAL</b>	<b>513</b>	<b>60</b>		<b>600</b>	

**Table 2.2.1.2 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of FREE RANGE LAYING HENS**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU31	6	6	10	60	
HU32	3	3	10	30	
<b>TOTAL</b>	<b>9</b>	<b>9</b>		<b>90</b>	

**Table 2.2.1.3 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of CHICKEN BREEDERS**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	11	6	10	60	HI
HU21	63	18	10	180	HI
HU22	31	10	10	100	HI
HU23	1	1	10	10	HI
HU31	6	4	10	40	HI
HU32	29	10	10	100	HI
HU33	7	4	10	40	HI
<b>TOTAL</b>	<b>148</b>	<b>53</b>		<b>530</b>	

**Table 2.2.1.4 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of FATTENING TURKEYS**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	2	1	10	10	HI
HU21	26	6	10	60	HI
HU22	161	38	10	380	HI
HU23	61	10	10	100	HI
HU31	5	2	10	20	HI
HU32	24	8	10	80	HI
HU33	83	25	10	250	HI
<b>TOTAL</b>	<b>362</b>	<b>90</b>		<b>900</b>	



**Table 2.2.1.5 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of TURKEY BREEDERS**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	2	2	10	20	HI
HU31	4	4	10	40	HI
HU32	15	15	10	150	HI
HU33	11	11	10	11	HI
<b>TOTAL</b>	<b>32</b>	<b>32</b>		<b>320</b>	

**Table 2.2.1.6 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of RATTIES**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU21	1	1	10	10	HI
HU31	2	2	10	20	HI
HU32	3	3	10	30	HI
<b>TOTAL</b>	<b>6</b>	<b>6</b>		<b>60</b>	

**Table 2.2.1.7 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of FARMED FEATHERED GAME (pheasants, partridges, mallards)**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	3	3	10	30	HI
HU21	9	9	10	90	HI
HU22	4	4	10	40	HI
HU23	3	3	10	30	HI
HU31	11	11	10	110	HI
HU32	4	4	10	40	HI
HU33	10	10	10	100	HI
<b>TOTAL</b>	<b>44</b>	<b>44</b>		<b>440</b>	

**Table 2.2.1.8 POULTRY HOLDINGS (except ducks and geese) TO BE SAMPLED**

**Serological investigation on holdings of „BACKYARD FLOCKS“**

NUT (2) code	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	14735	60	10	600	HI
HU21	21509	60	10	600	HI
HU22	50400	60	10	600	HI
HU23	62931	60	10	600	HI
HU31	41870	60	10	600	HI
HU32	50036	60	10	600	HI
HU33	41230	60	10	600	HI
<b>TOTAL</b>	<b>282711</b>	<b>420</b>		<b>4200</b>	

**Table 2.2.2 DUCK AND GOOSE HOLDINGS TO BE SAMPLED**

**Serological investigation**

NUT (2) code <sup>(b)</sup>	Total number of duck and goose holdings	Total number of duck and goose holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
HU10	20	20	40	800	HI
HU21	8	8	40	320	HI
HU22	3	3	40	120	HI
HU23	2	2	40	80	HI
HU31	8	8	40	320	HI
HU32	93	59	40	2360	HI
HU33	583	90	40	3600	HI
<b>TOTAL</b>	<b>716</b>	<b>190</b>		<b>7600</b>	

### **2.3 Laboratory testing: description of the laboratory tests used**

For the testing of all poultry categories mentioned in section 2.2.1, the haemagglutination inhibition test (HI) will be used. The serological testing with the HI method for avian influenza subtypes H5 and H7 will be carried out. Birds showing positive result for serological tests will be re-tested by virus isolation using 9-11 days old embryonated incubated eggs and by RT-PCR.

All laboratory tests will be carried out in accordance with Chapter 2.7.12. on Highly Pathogenic Avian Influenza of Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Fifth Edition, OIE and Commission Decision 2006/437/EC approving a Diagnostic Manual for avian influenza as provided for in Council Directive 2005/94/EC.

### **3. Description of the surveillance programme in wild birds**

#### **3.1 Objectives, general requirements and criteria**

The Animal Health and Animal Welfare Directorate of the Central Agricultural Office, in co-operation with other directorates of the same office and with the Ministry of Agriculture and Rural Development as well as with the Ministry for Environment and Water and the Hungarian Ornithological Society are continuing to monitor wild birds for Avian Influenza.

##### **3.1.1 Timeframe and Reporting**

Sampling will be started at the beginning of the year 2010 and shall be finished by the end of 2010. (The survey shall be completed by the 31<sup>st</sup> of December, 2010.)  
The final report of the survey will be submitted to the Commission and the CRJ. until 31<sup>st</sup> of March, 2011 at the latest.

A monthly report containing all positive results found during the survey will be provided to the Commission by the Animal Health and Animal Welfare Directorate of the Central Agricultural Office by the end of each month.

##### **3.1.2 Laboratories involved:**

All samples will be tested by the National Reference Laboratory for Avian Influenza (NRI), no other laboratory will be involved:

Name: Veterinary Diagnostic Directorate of the Central Agricultural Office  
Állategészségügyi Diagnosztikai Igazgatóság  
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Mailing Address: 1581 Budapest, 146. Pf. 2., Hungary  
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## **3.2 Design and implementation**

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The monitoring programme includes the testing of 3500 wild birds in total.

The samples to be taken will be stratified as follows:

- 40% passive surveillance
- 60% active surveillance

### **3.2.1 Passive surveillance**

The passive surveillance involves those sick and dead wild birds, which will be found in:

- areas where increased incidence of morbidity and mortality in wild birds occurs;
- areas close to the lakes and waterways in particular when these areas are in proximity to domestic poultry farms;
- areas where cases of HPAI H5N1 have been identified in wild birds or poultry to possibly identify asymptomatic carriers;
- areas epidemiologically linked to these cases.

The passive surveillance will be targeted on birds belonging to identified “higher risk” species listed in part D of Annex II of the Commission Decision 2007/268/EC on the implementation of surveillance programmes for avian influenza in poultry and wild birds to be carried out in the Member States and amending Decision 2004/450/EC and other wild birds living in close proximity with them and also on birds coming possibly in close contact to domestic poultry holdings, which might function as “bridge species”, in particular those that are listed in part E of Annex II of the Commission Decision mentioned above.

### **3.2.2 Active surveillance**

The active surveillance involves living and clinically healthy and/or clinically diseased, injured or hunted birds. The samples to be taken will be stratified as follows:

- 70% water fowl (Anseriformes) which will be sampled during the hunting season from shot birds
- 30% other wild birds such as Charadriiformes (shore birds and gulls), swans, pigeons, etc. including zoo birds and birds kept in sanctuaries.

The location of sampling will be selected in co-operation with the above named institutions in order to concentrate on high risk resting areas of migratory water fowl crossing the territory of Hungary.

Table 3.2.1 indicates the planned amount of wild birds to be sampled.

**Table 3.2.1 WILD BIRDS TO BE SAMPLED**

NUT (2) code	Wild birds to be sampled	Total number of samples to be taken for active surveillance	Total number of samples to be taken for passive surveillance
HU10	Anseriformes	130	120
	Charidriiformes and others	50	
HU21	Anseriformes	220	210
	Charidriiformes and others	100	
HU22	Anseriformes	220	210
	Charidriiformes and others	100	
HU23	Anseriformes	220	210
	Charidriiformes and others	100	
HU31	Anseriformes	210	190
	Charidriiformes and others	90	
HU32	Anseriformes	220	230
	Charidriiformes and others	100	
HU33	Anseriformes	240	230
	Charidriiformes and others	100	
<b>TOTAL</b>		<b>2100</b>	<b>1400</b>

### 3.3 Laboratory testing: description of the laboratory tests used

The swab samples for wild bird monitoring will be tested by molecular biological methods. Molecular biological testing (RT-PCR) will be performed with the general influenza A primer M-gene (M +25, M-124 and M +64 probe) and using H5, H7 and N1 primers (VLA protocol, 2006). Positive samples will be re-tested by virus isolation test (VI). Dead birds collected and sent into the laboratory will undergo routine post-mortem inspection including pathohistology.

All laboratory tests will be carried out in accordance with Commission Decision 2006/437/EC approving a Diagnostic Manual for avian influenza as provided for in Council Directive 2005/94/EC.

### 4. Description of the epidemiological situation of the disease in poultry during the last five years

In Hungary the first outbreak of avian influenza in poultry caused by the highly pathogen H5N1 virus was in June-July of 2006. There were 29 outbreaks at this time. All outbreaks were immediately localised and eradicated. No reoccurrence was present. In January of 2007 there were 2 outbreaks. These outbreaks were immediately localised and eradicated, too. There was no connection in between the outbreaks of 2006 and 2007.



#### **4.1 Measures included in the programme for poultry surveillance**

##### **4.1.1 Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme**

Animal Health and Animal Welfare Directorate of the Central Agricultural Office

Address: H-1149 Budapest, Tábornok u. 2.

Tel: +36-1-460-6300

Fax: +36-1-222-6065

##### **4.1.2 System in place for the registration of holdings**

All holdings are registered by the competent County Food Chain Safety and Animal Health Directorates. The directorates submit these registration data of holdings to the Animal Health and Animal Welfare Directorate of the Central Agricultural Office.

##### **4.1.3 Data on vaccination**

In Hungary the use of any type of vaccines against the virus of avian influenza in poultry is prohibited.

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

There were 64 positive cases for the virus of HPAI in wild birds in 2006.

#### **5.1 Measures included in the programme for wild birds surveillance**

##### **5.1.1 Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme**

Animal Health and Animal Welfare Directorate of the Central Agricultural Office

Address: H-1149 Budapest, Tábornok u. 2.

Tel: +36-1-460-6300

Fax: +36-1-222-6065

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

The surveillance programme is extended to the whole territory of Hungary taking into consideration that large amount of migrating wild birds from different species crosses or have rest in this area. The geographical and administrative areas are bound according to the county system in Hungary. The County Food Chain Safety and Animal Health Directorates are responsible for the local management of the programme.

### **5.1.3 Estimation of the local and migratory wildlife population**

The estimated local wildlife population in Hungary consists of approximately 9731000 – 13206000 pair of nesting birds (ie. 19462000 – 26412000 birds) and 10273000 – 18122000 wintering birds.

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

In case of founding a suspicious case the owner or the veterinarian of the holding or the founder of the wild bird should immediately notify the competent district veterinary officer who decrees about the obligatory measures according to the contingency plan for the control of avian influenza and Newcastle disease in Hungary. This contingency plan is approved by the Commission in the Commission Decision No. 2004/402/EC.

Except the contingency plan the Decree of the Minister of Agriculture and Rural Development No. 143/2007. (XII. 4.) on detailed rules of protection against avian influenza contains measures to be taken in case of a suspicion of the disease of avian influenza.

## 7. Costs

### 7.1 Detailed analysis of the costs

#### 7.1.1 Poultry (see Table 7.1.1)

**Table 7.1.1 Detailed analysis of the costs (Poultry)**

Poultry category	Total number of tests to be performed per method	Methods of laboratory analysis	Unitary test cost per method (EUR)	Total cost (EUR)
Laying hens	600	HI (H5+H7)	12	7200
Free range laying hens	90	HI (H5+H7)	12	1080
Chicken breeder	530	HI (H5+H7)	12	6360
Fattening turkeys	900	HI (H5+H7)	12	10800
Turkey breeder	320	HI (H5+H7)	12	3840
Ratites	60	HI (H5+H7)	12	720
Farmed feathered game	440	HI (H5+H7)	12	5280
Backyard flocks	4200	HI (H5+H7)	12	50400
Ducks and geese	7600	HI (H5+H7)	12	91200
<b>SUBTOTAL (HI)</b>	<b>14740</b>			<b>176880</b>
~7% PCR	1030	PCR	36	37080
~7% VI	1030	VI	25	25750
<b>TOTAL (HI+PCR+VI)</b>	<b>16800</b>			<b>239710</b>

#### 7.1.2 Wild birds (see Table 7.1.2)

**Table 7.1.2 Detailed analysis of the costs (Wild birds)**

Type of surveillance	Total number of tests to be performed per method	Methods of laboratory analysis	Unitary test cost per method (EUR)	Total cost (EUR)
Active	2100	PCR	36	75600
Passive	1400	PCR	36	50400
<b>SUBTOTAL (PCR)</b>	<b>3500</b>			<b>126000</b>
10% VI	350	VI	25	8750
<b>TOTAL (PCR + VI)</b>	<b>3850</b>			<b>134750</b>

## 7.2 Summary of the costs

### 7.2.1 Poultry surveillance (see Table 7.2.1)

**Table 7.2.1 Measures eligible for co-financing surveillance in poultry**

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost per method (EUR)	Total cost (EUR)
Serological pre-screening	-	-	-
Haemagglutination-inhibition-test (HI)	14740 (14740 for H5 and 14740 for H7)	12	176880
Virus isolation test (VI)	1030	25	25750
PCR test (RT-PCR)	1030	36	37080
Other measures to be covered	Specify activities		
Sampling	-	-	-
Others	-	-	-
<b>TOTAL</b>			<b>239710</b>

### 7.2.2 Wild bird surveillance (see Table 7.2.2)

**Table 7.2.2 Measures eligible for co-financing surveillance in wild birds**

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost per method (EUR)	Total cost (EUR)
Serological pre-screening	-	-	-
Haemagglutination-inhibition-test (HI)	-	-	-
Virus isolation test (VI)	350	25	8750
PCR test (RT-PCR)	3500	36	126000
Other measures to be covered	Specify activities		
Sampling	3500 swab sampling	20	70000
Others	-	-	-
<b>TOTAL</b>			<b>204750</b>

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