



EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

SANCO/12953/2010

*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

The Netherlands

* in accordance with Council Decision 2009/470/EC

Standard requirements for the submission of surveillance programmes for avian influenza



PROGRAMME for ERADICATION : ANNEX IV

Member States seeking a financial contribution from the Community for national programmes for the control and monitoring of avian influenza in poultry and wild birds shall submit applications containing at least the information set out in this form.

The central data base keeps all submissions. However only the information in the last submission is shown when viewing and used when processing the data.

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IMPORTANT: AFTER SUBMITTING THE FORM DO NOT FORGET TO SAVE IT ON YOUR COMPUTER FOR YOUR RECORDS!

Standard requirements for the submission of surveillance programmes for avian influenza

2009-2010

1. Identification of the programme

Member state : NEDERLAND

Disease : avian influenza in poultry and wild birds

Request of Community co-financing from beginning of :

2011

to end of

2011

1.1 Contact

Name : Mrs Susanne Waelen / Mr Jeroen Bonet

Phone : 0031 70 3785137 / 0031 70 3785146

Fax : 0031 70 3786100

Email : s.waelen@minInv.nl

2. Description of the surveillance programme in poultry

2.1 Objectives, general requirements and criteria

(max. 4000 chars) :

Serological surveillance for LPAI subtypes H5 and H7 according to Commission Decision 2007/268/EC and SANCO/4692/2009-rev1.

Objective:

Serological surveillance for LPAI in poultry in order to detect subclinical infections with LPAI of subtypes H5 and H7, thereby complementing early detection systems and preventing possible mutation of these viruses to HPAI.

Testing is carried out at research institutes which are authorised by the competent authorities and under control of the NRL. All positive and negative results of both serological and virological laboratory investigations obtained during surveillance are reported to the Commission through the Commission's online system every three months (as required by SANCO/4692/2009)

Standard requirements for the submission of surveillance programmes for avian influenza

2.2 Design and implementation

(max. 4000 chars):

The Dutch Surveillance program is conform, but on some points more extensive than, the requirements layed down in Commission Decision 2007/268/EC. Table 1 of Commission Decision 2007/268/EC shows the number of holdings to be tested per category, the 'number of holdings to be tested' in table 2.2.1. (see appendix, annex I) are conform these requirements.

However, in reality all commercial poultry holdings in the Netherlands, including all commercial broiler holdings, are sampled and serologically tested at least once a year. AI monitoring is mandatory in the Netherlands for all commercial poultry holdings. The holdings at risk, like the free range poultry and the turkeys, are sampled 3 or 4 times a year.

Sampling is carried out by, or under control of, a veterinarian. Testing of poultry samples is carried out at the Dutch Animal Health Service (GD) authorised by the competent authorities and under control of the NRL: the Central Veterinary Institute of Wageningen UR (CVI). The confirmation tests are carried out at the Central Veterinary Institute of Wageningen UR (CVI).

The details requested under 2.2.1 are shown in the attachment (Annex I).

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

Standard requirements for the submission of surveillance programmes for avian influenza

Category : laying hens

delete this category

NUTS (2) (a)	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	Method of laboratory analysis
All categories, see annex I for details	1 928	250	30	1	ELISA (if necessary HI-test H5 and H7)
Total	1 928	250		1	
<i>(w) 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.</i>					

Add a category

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

Serological investigation

NUTS (2) (a)	Total number of duck and geese holdings	Total number of duck and geese holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Method of laboratory analysis
Netherlands (see annex I for details)	91	58	40	1	ELISA (if necessary HI-test H5 and H7)
Total	91	58		1	

Standard requirements for the submission of surveillance programmes for avian influenza

(a) Refer 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.

Add a new row

2.3 Laboratory testing: description of the laboratory tests used

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

Laboratory tests are carried out in accordance with the avian influenza diagnostic manual (Commission Decision 2006/437/EC). The following laboratory test are used:

Dutch Animal Health Service (GD):

-Serological pre-screening: ELISA

Central Veterinary Institute of Wageningen UR (CVI):

-Haemagglutination-inhibition-test (HI) for H5 and H7 (confirmation test)

-Virus isolation test and RT-PCR (only when positive result HI)

3. Description of the surveillance programme in wild birds

3.1 Objectives, general requirements and criteria

(max 4000 chars)

Objective:

Virological surveillance for Avian Influenza in wild birds aims to identify the risk of introduction of AI viruses (LPAI and HPAI) to domestic poultry according to Commission Decision 2007/268/EC, by:

- Ensuring early detection of HPAI H5N1 by investigating incidence of morbidity and mortality in wild birds, in particular in selected "higher risk" species.
- Enhancing surveillance in event that HPAI H5N1 is detected in wild birds to determine whether wild birds or other species can acts as asymptomatic carriers or "bridge species"

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- Continuing a "baseline" surveillance of different species of free living migratory birds as part of continuous monitoring for LPAI viruses, Anseriformes (water fowl) and Charadriiformes (shorebirds and gulls) shall be the main sampling targets to assess if they carry LPAI viruses of H5 and H7 subtypes (which would in any case also detect HPAI H5N1 and other HPAI, if present). Higher risk species are targeted in particular.

Testing is carried out at research institutes which are authorised by the competent authorities and under control of the NRL. All positive and negative results of both serological and virological laboratory investigations obtained during surveillance are reported to the Commission through the Commission's online system every three months (as required by SANCO/4692/2009)

3.2 Design and implementation

(max. 4000 chars):

The Dutch Surveillance program is conform the requirements layed down in Commission Decision 2007/268/EC. The design of the surveillance is adapted to the national situation as regards selection of species to be sampled according to species predominance and bird population sizes. The sampling has considered the seasonality of migration patterns in The Netherlands. 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 years.

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 in the poultry husbandry systems in the different Member States.

Active surveillance (live wild birds):

- Sampling is done by bird ringers, ornithologists and bird watchers, coordinated by the Erasmus MC, Rotterdam.
- Testing of the live wild bird samples is carried out at Erasmus MC, Rotterdam, authorised by the competent authorities and under control of the NRL; the Central Veterinary Institute of Wageningen UR (CVI).

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Passive surveillance (sick or dead wild birds):

- SOVON Dutch Centre for Field Ornithology and The Food Consumer Product Safety Authority are contracted to coordinate the detection and collection of sick/dead birds throughout the Netherlands, by bird watchers, bird ringers etc. and civilians.
- Testing of the birds and their samples is carried out at the Central Veterinary Institute of Wageningen UR (CVI).

The details requested under 3.2.1 are shown in the attachment (Annex I)

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

NUTS (2) code/region (a)	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
The Netherlands (see annex I for details)	see annex I for details	11 250	10 000	1 250
Total		11 250	10 000	1 250
Add a new row				
<small>(a) Refers to the place of collection of birds/samples. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, region as defined in the programme by the member State is requested. Please fill in these values directly in the field.</small>				

3.3 Laboratory testing: description of the laboratory tests used

max 4000 chars :

Laboratory tests are carried out in accordance with the avian influenza diagnostic manual (Commission Decision 2006/437/EC). The following laboratory test are used:

Standard requirements for the submission of surveillance programmes for avian influenza

- Active surveillance (live wild birds) (Erasmus MC):
- RNA isolation and method sampling (the samples are pooled, to reduce the overall costs of isolation and subsequent analyses.)
- MA RT-PCR

Positive samples are tested using:

- RT-PCR H5/H7 (using the pooled samples which were positive in the MA RT-PCR)
- Virus isolation test (individual samples)
- Haemagglutination-inhibition-test (HI) for H5 and H7
- Sequencing of H5 or H7 positive samples

Passive surveillance (sick or dead wild birds) (Central Veterinary Institute of Wageningen)

- post mortem
- PCR test cloaca
- PCR test trachea
- RT-PCR H5/H7
- Virus isolation test on PCR positive samples.

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

max 4000 chars :

During the last five years the Netherlands is free of Avian Influenza.

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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):

Ministry of Agriculture, Nature and Food Quality, Department of Food, Animal Health and Welfare and Consumer Policy.

4.1.2 System in place for the registration of holdings

(max. 4000 chars):

Registration system in place in accordance with 90/539/EC article 6

4.1.3 Data on vaccination carried out

(max. 4000 chars):

Vaccination against Avian Influenza is carried out according to 2007/598/EG (zoos) and 2007/590/EG (poultry).

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It was allowed to vaccinate commercial free-range poultry and hobby poultry in the Netherlands against Avian Influenza until August 1st 2009. This was a voluntary program. Vaccination of birds in zoos is still allowed.

No vaccination Het is de aanvraag voor 2011 toch, dan kun je bij vaccinatie voorlopig invullen dat we dat niet doen, behalve in dierentuinen (daar is een beschikking over, ik zoek hem voor je op), we hadden een vacciantieprogramma voor hobbydieren en vrije uitloopkippen maar we zijn verlenging van de beschikking vergeten aan te vragen en er is eigenlijk ook geen vraag naar dus misschien moeten we dat maar zo laten. Als we van mening veranderen kunnen we dat altijd nog aangeven.

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

(max. 4000 chars):

No findings of HPAI in wild birds have occurred during the last 5 years.

5.1 Measures included in the programme for surveillance in wild birds

(max. 4000 chars):

Standard requirements for the submission of surveillance programmes for avian influenza

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

(max. 4000 chars):

Ministry of Agriculture, Nature and Food Quality, Department of Food, Animal Health and Welfare and Consumer Policy.

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

(max. 4000 chars):

There is an active and a passive surveillance system in place in the whole of The Netherlands. The geographical and administrative areas are the NUTS-2 codes.

5.1.3 *Estimation of the local and/or migratory wildlife population*

(max. 4000 chars):

See annex II: map with risk areas in The Netherlands

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

(max. 4000 chars):

Notification of HPAI and LPAI in poultry is mandatory for poultry owners, veterinarians and Laboratories with article 15 of the Dutch Animal Health and Welfare Act.

7. Costs

7.1 Detailed analysis of the costs

7.1.1 Poultry

(max. 4000 chars):

See annex I for more details on numbers and costs.

P.5. The monitoring is in reality far more extensive than shown in the appendix (annex I). In reality the number of holdings sampled equals the total number of poultry holdings.

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Annex 1.2

7.1.2 Wild birds

(max. 4000 chars):

See annex I for more details on numbers and costs.

P.S. The monitoring of Erasmus MC is more extensive than shown in the appendix (annex I), but only the numbers and costs paid for by the Ministry of Agriculture, Nature and Food Quality are shown here.

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7.2 Summary of the costs

7.2.1 Poultry surveillance

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
ELISA test	9 820	3.52	34506.4
agar gel immune diffusion test	0	0	0
Haemagglutination-inhibition-test (HI) for H5 (specify number of tests for H5)	360	22	8500
Haemagglutination-inhibition-test (HI) for H7 (specify number of tests for H7)	160	22	2200
Virus isolation test	0	0	0
PCR test	0	0	0
Total	10 220		43 366,40 €
Logistics, administration, mailing	9 820	0.27	2651.4
Total	0		2 651,40 €

Adda few row

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7.2.2 Wild bird surveillance

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
Haemagglutination-inhibition-test (HI) for H5/H7	600	4.29	2574
Virus isolation test	600	31.8	19080
PCR test	10 000	16.09	160900
Sequencing H5 or H7 pos live samples	82	80.47	6598.54
Total	11 200	52.18 €	189 152,54 €
Material and sampling costs (live wild birds)	10 000	1.08	10800
Logistics (five wild birds)	10 000	1.25	12500
Methods sample taking	10 000	0.8	8000
PCR test (RT-PCR H5/H7)	1 200	9.12	10944
Sampling and post mortem (dead wild birds)	1 250	45	56250
PCR test trachea (dead wild birds)	1 250	33	41250

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PCR test cloaca (dead wild birds)	1 250	33	41250
PCR (RT-PCR H5/H7) (dead wild birds)	150	33	4950
Logistics, administration, mailing (dead wild birds)	1 250	68,25	86312,5
Virus isolation test (dead birds)	75	97,6	7320
Total	36425	322,10 €	278 576,50 €

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 2 500Kb (+- 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!

Attachment reference **a_1272541192994**

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

Category : Laying hens (kooi + vaccin + scharrel)

NUTS 2 code	Total number of holdings	Total number of holdings to be sampled according to table on of 2007/268/EG	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
NL 11 Groningen	23	2	30	60	Prescreening:
NL 12 Friesland	16	1	30	30	ELISA test
NL 13 Drenthe	37	3	30	90	
NL 21 Overijssel	76	5	30	150	
NL 22 Gelderland	306	20	30	600	
NL 23 Flevoland	19	1	30	30	confirmation test (2% of the samples):
NL 31 Utrecht	46	3	30	90	Haemagglutination-inhibition-test H5 and H7
NL 32 Noord-Holland	7	1	30	30	
NL 33 Zuid Holland	5	1	30	30	
NL 34 Zeeland	15	1	30	30	
NL 41 Noord-Brabant	167	11	30	330	
NL 42 Limburg	166	11	30	330	
Total	883	60		1800	

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

Category : Free range laying hens (biologisch + vrije uitloop)

NUTS 2 code	Total number of			Total number of tests to be performed per method	Methods of laboratory analysis
	holdings	holdings to be sampled according to table on of 2007/268/EC	Number of samples per holding		
NL 11 Groningen	13	2	30	60	Prescreening:
NL 12 Friesland	11	2	30	60	ELISA test
NL 13 Drenthe	24	5	30	150	
NL 21 Overijssel	33	6	30	180	
NL 22 Gelderland	109	22	30	660	
NL 23 Flevoland	8	2	30	60	confirmation test (2% of the samples):
NL 31 Utrecht	29	6	30	180	Haemagglutination-inhibition-test H5 and H7
NL 32 Noord-Holland	2	1	30	30	
NL 33 Zuid Holland	1	1	30	30	
NL 34 Zeeland	7	1	30	30	
NL 41 Noord-Brabant	39	8	30	240	
NL 42 Limburg	21	4	30	120	
Total	297	60		1800	

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

Category : chicken breeders (opfok grootouderdieren, opfok legghennen, opfok ouderdieren, vermeerdering grootouderdieren, vermeerdering ouderdieren (leg en vlees))

NUTS 2 code	Total number of holdings to be sampled according to table on of 2007/268/EG			Total number of tests to be performed per method	Methods of laboratory analysis
	Total number of holdings	Number of samples per holding	Total number of tests to be performed per method		
NL 11 Groningen	11	1	30	30	Prescreening: ELISA test confirmation test (2% of the samples): Haemagglutination-inhibition-test H5 and H7
NL 12 Friesland	35	3	30	90	
NL 13 Drenthe	19	2	30	60	
NL 21 Overijssel	120	11	30	330	
NL 22 Gelderland	151	13	30	390	
NL 23 Flevoland	24	2	30	60	
NL 31 Utrecht	20	2	30	60	
NL 32 Noord-Holland	5	1	30	30	
NL 33 Zuid Holland	2	1	30	30	
NL 34 Zeeland	7	1	30	30	
NL 41 Noord-Brabant	178	15	30	450	
NL 42 Limburg	86	8	30	240	
Total	658	60		1800	

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

Category : Turkey breeders (kalkoenen: opfok ouderdieren/vermeerdering ouderdieren)

NUTS 2 code	Total number of			Total number of tests to be performed per method	Methods of laboratory analysis
	holdings	holdings to be sampled according to table on of 2007/268/EG	Number of samples per holding		
NL 11 Groningen	0	0	30	0	Prescreening:
NL 12 Friesland	0	0	30	0	ELISA test
NL 13 Drenthe	0	0	30	0	
NL 21 Overijssel	1	1	30	30	
NL 22 Gelderland	1	1	30	30	
NL 23 Flevoland	1	1	30	30	confirmation test (2% of the samples):
NL 31 Utrecht	0	0	30	0	Haemagglutination-inhibition-test H5 and H7
NL 32 Noord-Holland	0	0	30	0	
NL 33 Zuid Holland	0	0	30	0	
NL 34 Zeeland	0	0	30	0	
NL 41 Noord-Brabant	0	0	30	0	
NL 42 Limburg	0	0	30	0	
Total	3	3		90	

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

Category : Fattening turkeys (vleeskaikoenen)

NUTS 2 code	Total number of holdings	Total number of holdings to be sampled according to table on of 2007/268/EG	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
NL 11 Groningen	4	3	30	90	Prescreening:
NL 12 Friesland	0	0	30	0	ELISA test
NL 13 Drenthe	3	2	30	60	
NL 21 Overijssel	3	2	30	60	
NL 22 Gelderland	8	5	30	150	
NL 23 Flevoland	3	2	30	60	confirmation test (2% of the samples):
NL 31 Utrecht	0	0	30	0	Haemagglutination-inhibition-test H5 and H7
NL 32 Noord-Holland	0	0	30	0	
NL 33 Zuid Holland	0	0	30	0	
NL 34 Zeeland	0	0	30	0	
NL 41 Noord-Brabant	9	6	30	180	
NL 42 Limburg	32	22	30	660	
Total	62	42		1260	

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

Category : broilers (free range production) (vleeskuikens: biologisch + vrije uitloop)

NUTS 2 code	Total number of			Total number of tests to be performed per method	Methods of laboratory analysis
	holdings	holdings to be sampled according to table on of 2007/268/EG	Number of samples per holding		
NL 11 Groningen	0	0	30	0	Prescreening:
NL 12 Friesland	0	0	30	0	ELISA test
NL 13 Drenthe	0	0	30	0	
NL 21 Overijssel	0	0	30	0	
NL 22 Gelderland	16	16	30	480	confirmation test (2% of the samples):
NL 23 Flevoland	1	1	30	30	Haemagglutination-inhibition-test H5 and H7
NL 31 Utrecht	0	0	30	0	
NL 32 Noord-Holland	0	0	30	0	
NL 33 Zuid Holland	0	0	30	0	
NL 34 Zeeland	0	0	30	0	
NL 41 Noord-Brabant	8	8	30	240	
NL 42 Limburg	0	0	30	0	
Total	25	25		750	

2.2.2 Duck and geese holdings to be sampled according to point C of Annex I to Decision 2007/268/EC
 Category : Duck breeders

NUTS 2 code	Total number of holdings to be sampled according to table on of 2007/268/EG			Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
	Total number of holdings	holdings to be sampled according to table on of 2007/268/EG	Number of samples per holding			
NL 11 Groningen	0	0	40	0	0	Prescreening:
NL 12 Friesland	0	0	40	0	0	ELISA test
NL 13 Drenthe	0	0	40	0	0	
NL 21 Overijssel	1	1	40	40		
NL 22 Gelderland	14	14	40	560		confirmation test (2% of the samples):
NL 23 Flevoland	1	1	40	40		Haemagglutination-inhibition-test H5 and H7
NL 31 Utrecht	0	0	40	0	0	
NL 32 Noord-Holland	0	0	40	0	0	
NL 33 Zuid Holland	0	0	40	0	0	
NL 34 Zeeland	0	0	40	0	0	
NL 41 Noord-Brabant	0	0	40	0	0	
NL 42 Limburg	0	0	40	0	0	
Total	16	16			640	

2.2.2 Duck and geese holdings to be sampled

Category : Geese breeders

NUTS 2 code	Total number of holdings	Total number of holdings to be sampled according to table of 2007/268/EG	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
NL 11 Groningen	0	0	40	0	ELISA test
NL 12 Friesland	0	0	40	0	
NL 13 Drenthe	0	0	40	0	
NL 21 Overijssel	0	0	40	0	
NL 22 Gelderland	0	0	40	0	
NL 23 Flevoland	0	0	40	0	
NL 31 Utrecht	0	0	40	0	
NL 32 Noord-Holland	0	0	40	0	
NL 33 Zuid Holland	0	0	40	0	
NL 34 Zeeland	0	0	40	0	
NL 41 Noord-Brabant	0	0	40	0	
NL 42 Limburg	0	0	40	0	
Total	0	0		0	confirmation test (2% of the samples): Haemagglutination-inhibition-test H5 and H7

2.2.2 Duck and geese holdings to be sampled

Category : Fattening ducks

NUTS 2 code	Total number of holdings	Total number of holdings to be sampled according to table on of 2007/268/EG	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
NL 11 Groningen	5	4	40	160	Prescreening:
NL 12 Friesland	0	0	40	0	ELISA test
NL 13 Drenthe	5	4	40	160	
NL 21 Overijssel	8	6	40	240	
NL 22 Gelderland	29	25	40	1000	
NL 23 Flevoland	16	13	40	520	confirmation test (2% of the samples):
NL 31 Utrecht	5	4	40	160	Haemagglutination-inhibition-test H5 and H7
NL 32 Noord-Holland	0	0	40	0	
NL 33 Zuid Holland	0	0	40	0	
NL 34 Zeeland	0	0	40	0	
NL 41 Noord-Brabant	3	2	40	80	
NL 42 Limburg	2	1	40	40	
Total	75	59		2360	

2.2.2 Duck and geese holdings to be sampled
 Category : Fattening Geese

NUTS 2 code	Total number of holdings	Total number of holdings to be sampled according to table of 2007/268/EG	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
NL 11 Groningen	0	0	40	0	Prescreening:
NL 12 Friesland	0	0	40	0	ELISA test
NL 13 Drenthe	0	0	40	0	
NL 21 Overijssel	0	0	40	0	
NL 22 Gelderland	0	0	40	0	
NL 23 Flevoland	0	0	40	0	confirmation test (2% of the samples):
NL 31 Utrecht	0	0	40	0	Haemagglutination-inhibition-test H5 and H7
NL 32 Noord-Holland	0	0	40	0	
NL 33 Zuid Holland	0	0	40	0	
NL 34 Zeeland	0	0	40	0	
NL 41 Noord-Brabant	0	0	40	0	
NL 42 Limburg	0	0	40	0	
Total	0	0		0	

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

NUTS 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 ^(c)
NL 11 Groningen	Swans/diverse ^(c)	350	175	175
NL 12 Friesland	Ducks/diverse ^(c)	1875	1800	75
NL 12 Friesland	Geese/diverse ^(c)	425	350	75
NL 13 Drenthe	diverse ^(c)	75	-	75
NL 21 Overijssel	diverse ^(c)	25	-	25
NL 22 Gelderland	Geese//diverse ^(c)	400	350	50
NL 22 Gelderland	Gulls//diverse ^(c)	400	350	50
NL 23 Flevoland	Swans//diverse ^(c)	225	175	50
NL 31 Utrecht	diverse ^(c)	50	-	50
NL 32 Noord-Holland	Geese//diverse ^(c)	1125	700	425
NL 33 Zuid Holland	Wigeon//diverse ^(c)	1550	1500	50
NL 33 Zuid Holland	Mallard//diverse ^(c)	3950	3900	50
NL 34 Zeeland	Geese//diverse ^(c)	400	350	50
NL 41 Noord-Brabant	Geese//diverse ^(c)	375	350	25
NL 42 Limburg	diverse ^(c)	25	-	25
Total	0	11.250	10.000	1.250

c) Passive surveillance focuses on Swans, Geese, Ducks, Cormorants, Herons, Grebes, Common buzzard, Rails, Waders, Skuas, Gulls& Terns

7.2 Summary of the costs

7.2.1 Poultry surveillance

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
ELISA test (poultry) (GD)	10500	3,52	36.960,00
agar gel immune diffusion test			
Haemagglutination-inhibition-test (HI) for H5 (H5N2 and H5N7) (2% poultry) (CVI) ^(a)	2x150	11	3.300,00
Haemagglutination-inhibition-test (HI) for H7 (H7N1 and H7N7) (2% poultry) (CVI) ^(a)	2x150	11	3.300,00
Haemagglutination-inhibition-test (HI) for H5 (H5N2 and H5N7) (2% ducks) (CVI) ^(a)	2x60	11	1.320,00
Haemagglutination-inhibition-test (HI) for H7 (H7N1 and H7N7)(2% ducks) (CVI) ^(a)	2x60	11	1.320,00
Virus isolation test			
PCR test			
Total			46.200,00

(a) confirmation test on 2% of the ELISA samples (150 poultry samples and 60 duck samples). The costs per Haemagglutination-inhibition-test are 11 euro. For each subtype two tests are needed.

Other measures to be covered	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
Logistics, administration, mailing, reception ^(b)	10500	0,27	2.835,00
Total			49.035,00

(c) For the ELISA samples a standard fee of €8,32 is charged per batch. So the logistics, administration and mailing are independent of the number of samples, but dependent on the number of holdings sampled. This means an average per sample of €0,27.

7.2 Summary of the costs

7.2.1 Wild bird surveillance (passive / dead birds)

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
Sampling and post mortem (CVI)	1250	45	56.250,00
PCR test cloaca (CVI)	1250	33	41.250,00
PCR test trachea (CVI)	1250	33	41.250,00
PCR (RT-PCR H5/H7) (CVI)	2x75	33	4.950,00
Virus Isolation test	75	98	7.350,00
Total			151.050,00

Other measures to be covered	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
Logistics, administration, mailing (SOVON)			85.313,05
Total			236.363,05

7.2 Summary of the costs











7.2.1 Wild bird surveillance (active / live birds)

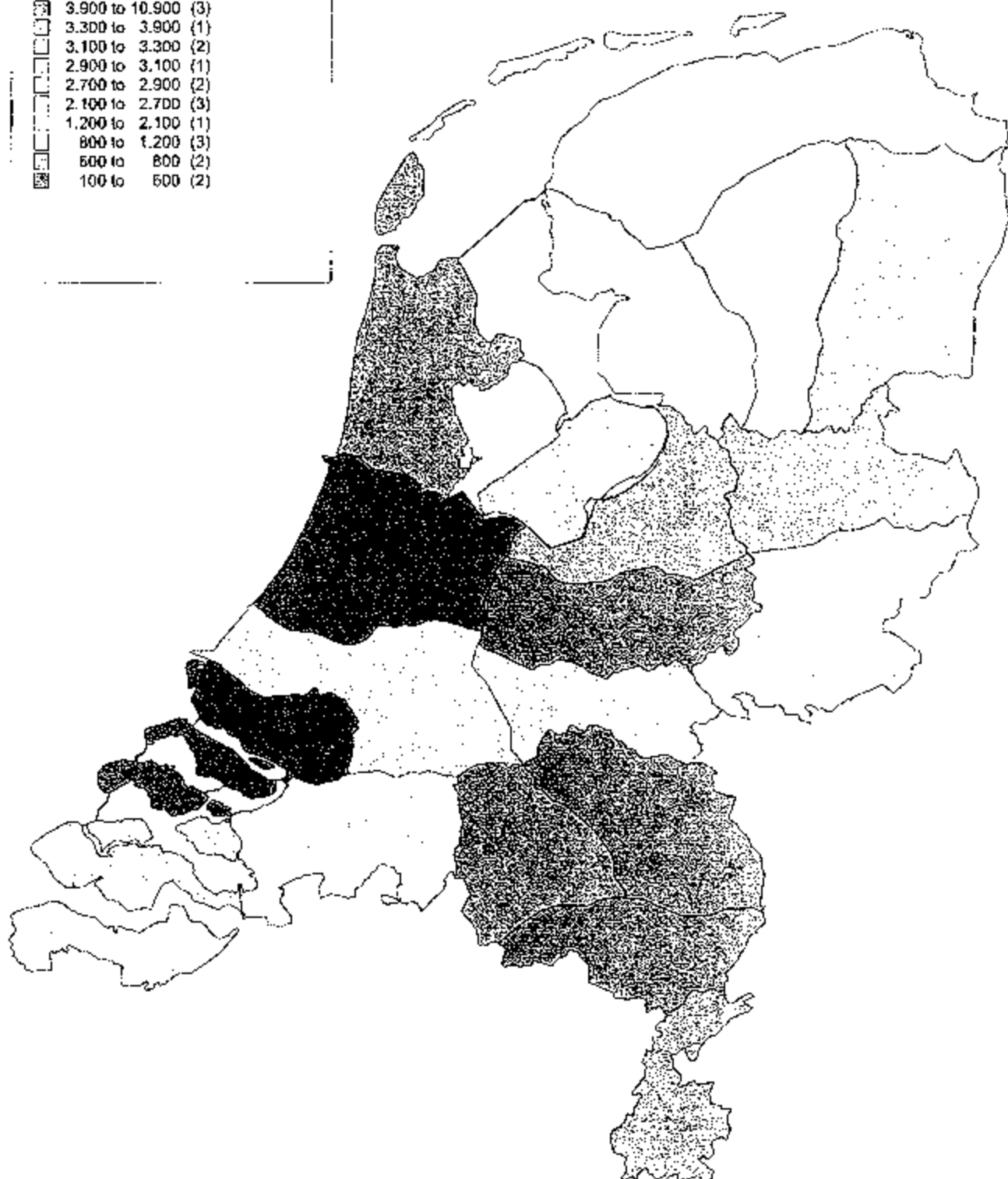
Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
Transport and logistics	10000	1,25	12.500,00
Methods sampletaking	10000	0,80	8.000,00
Material and sampling costs	10000	1,08	10.800,00
RNA-isolation and method sampling ^(c)	10000	6,97	69.700,00
PCR test (MA RT-PCR) ^(c)	10000	9,12	91.200,00
PCR test (RT-PCR H5/H7) ^{(c)(d)}	2x600	9,12	10.944,00
Virus isolation test	600	31,80	19.080,00
Haemagglutination-inhibition-test (HI) for H5/H7	600	4,29	2.574,00
Sequencing H5 or H7 positive samples	82	80,47	5.793,84
Total			230.591,84

(c) before virus isolation the samples are pooled, to reduce the overall costs of isolation and analyses. Approximately 600 samples are expected to be in a pool that tests positive for H5/H7. From the individual samples virus is then isolated, tested and, if positive, sequenced.

Gemiddelde pluimveedichtheid

Gemiddelde pluimveedichtheid
pluimvee / km²

	3.900 to 10.900 (3)
	3.300 to 3.900 (1)
	3.100 to 3.300 (2)
	2.900 to 3.100 (1)
	2.700 to 2.900 (2)
	2.100 to 2.700 (3)
	1.200 to 2.100 (1)
	800 to 1.200 (3)
	500 to 800 (2)
	100 to 500 (2)



Gemiddeld aantal
watervogels / km²

