ANNEX

Programmes for surveillance of avian influenza in poultry and wild birds to be carried out in the Member States in 2005 and 2006

A.OBJECTIVES

- 1. To estimate the prevalence of infections with avian influenza virus subtypes H5 and H7 in different species of poultry by repeating previous screening exercises provided for in Decisions 2004/111/EC and 2004/630/EC in a modified, more targeted manner.
- 2. To continue surveillance for avian influenza on a voluntary basis in wild birds. The outcome of such surveillance should further provide valuable information for an early warning system of strains that may be introduced into poultry flocks from wild birds.
- 3. To contribute to the knowledge on the threats of avian influenza to animal health from wildlife.
- 4. To foster the connection and integration of human and veterinary networks for influenza surveillance.
- B. GENERAL REQUIREMENTS AND CRITERIA FOR SURVEYS IN POULTRY
- 1. Sampling shall cover a period appropriate to production periods for each poultry category as required. For example, in many Member States a large slaughter of poultry (in particular turkeys and geese) takes place around Christmas. Sampling shall not extend beyond 31 January 2006.
- 2. 31 March 2006 shall be the date for the submission of the final survey results.
- 3. Testing of samples shall be carried out at national laboratories for avian influenza (NL) in Member States or by other laboratories authorised by the competent authorities and under the control of the NL.
- 4. All results (both serological and virological) shall be sent to the Community Reference Laboratory (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 survey shall be supplied to NL's by the CRL to ensure uniformity.
- 5. All avian influenza (AI) virus isolates shall be submitted to the CRL in accordance with Community legislation. Viruses of H5/H7 subtype shall be submitted without delay and shall be subjected to the standard characterisation tests (nucleotide sequencing/IVPI) according to Directive 92/40/EEC. In addition, the CRL shall require that H5 or H7 positive sera collected from anseriformes be submitted 'blind' in order that an archive be established to facilitate future test development.
- 6. All positive findings shall be retrospectively investigated at the holding and the conclusions of this investigation shall be reported to the Commission and the CRL.
- 7. Specific protocols to accompany the sending of material to the CRL and reporting tables for collection of survey data shall be provided by the CRL. In those tables the laboratory testing methods used shall be indicated. The tables provided shall be used to submit results in a single document.
- 8. Blood samples for serological examination shall be collected from all species of poultry including those reared in free-range systems, from at least 5 to 10 birds (except

ducks geese and quail) per holding, and from the different sheds, if more than one shed is present on a holding.

- 9. Sampling shall be stratified throughout the territory of the whole Member State, so that samples can be considered as representative for the whole of the Member State, taking into account:
- (a) the number of holdings to be sampled (excluding ducks, geese and turkeys); that number shall be defined so as to ensure the identification of at least one infected holding if the prevalence of infected holdings is at least 5 %, with a 95 % confidence interval; (see table 1) and
- (b) the number of birds sampled from each holding shall be defined so as to ensure 95 % probability of identifying at least one positive bird if the prevalence of sero-positive birds is ≥ 30 %.
- 10. The sampling design shall also consider:
- (a) The types of production and their specific risks, shall be targeted to free range production and outdoor keeping plus taking into account other factors such as multiage, use of surface water, a relatively longer life span, the presence of more than one species on the holding or other relevant factors.
- (b) The number of turkey, duck and goose holdings to be sampled shall 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 (see table 2).
- (c) Where significant number of holdings producing ratites and quails are present in a Member State they shall be included in the programme. With regard to quails only adult (or laying) breeders shall be sampled.
- (d) The time period for sampling shall coincide with seasonal production. 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) Member States that must carry out sampling for Newcastle disease to maintain their status as Newcastle disease non-vaccinating countries in accordance with Commission Decision 94/327/EC⁽¹⁾ may utilise these samples from breeding flocks for the surveillance of H5/H7 antibodies.

TABLE 1

Number of holdings to be sampled of each poultry category (except turkey, duck and goose holdings)

Number of holdings per poultry category per Member State	Number of holdings to be sampled
Up to 34	All
35-50	35
51-80	42
81-250	53
> 250	60

TABLE 2

Number of turkey, duck and goose holdings to be sampled

Number of holdings per Member State	Number of holdings to be sampled
Up to 46	All
47-60	47
61-100	59
101-350	80
> 350	90

C. SPECIFIC REQUIREMENTS FOR DETECTION OF INFECTIONS WITH H5/H7 SUBTYPES OF AVIAN INFLUENZA IN DUCKS, GOOSE AND QUAIL

- 1. Blood samples for serological testing shall be taken preferably from birds which are kept outside in fields.
- 2. From each selected holding 40 to 50 blood samples shall be taken for serological testing.

I^{F1}D. SURVEY FOR AVIAN INFLUENZA IN WILD BIRDS

In those Member States where surveillance will also involve wild birds the following guidelines shall be followed.

- D.1. Survey design and implementation
- 1. Liaisons with bird conservation/watching institutions and ringing stations will be necessary. Sampling where appropriate shall be carried out by staff from these groups/ stations or by hunters.
- 2. Active surveillance on living or hunted birds shall be targeted on:
- (a) the population of wild bird species presenting a higher risk to be identified, based upon:
 - (i) origin and migratory flyways;
 - (ii) numbers of wild birds in the Community; and
 - (iii) likelihood of contact with domestic poultry;
- (b) identify sites at risk, based upon:
 - (i) mixing sites of high number of migratory birds involving different species and in particular those listed in part F;
 - (ii) proximity to domestic poultry farms; and
 - (iii) location along migratory flyways.

Sampling must take account of the seasonality of migration patterns, which may vary in different Member States and the species of birds listed in Annex F.

3. Passive surveillance on wild birds found dead shall primarily target the occurrence of abnormal mortality or significant disease outbreaks in:

- (a) wild birds species listed in part F and other wild birds living in contact with them; and
- (b) at sites as referred to in point 2(b)(i).

The occurrence of mortality in several species at the same site shall be an additional factor to be considered.

- D.2. Sampling procedures
- 1. Cloacal swabs for virological examination shall be taken. In addition to 'first year' birds in autumn, host species with high susceptibility and increased contact with poultry (such as Mallard ducks) may offer the highest chance of success.
- 2. In addition to cloacal swabs or faeces, tissues, (namely the brain, heart, lung, kidney and intestines from wild birds found dead or shot shall also be sampled for virus isolation and molecular detection (PCR). Molecular techniques shall only be carried out in laboratories able to guarantee quality assurance and using methods recognised by the CRL for avian influenza.
- 3. Samples shall be taken from different species of free living birds. Waterfowl and shorebirds shall be the main sampling targets.
- 4. Swabs containing faeces, or carefully collected fresh faeces shall be taken from wild birds trapped, hunted and found freshly dead.
- 5. Pooling of up to five samples from the same species collected at the same site and same time may be permitted. Specific care has to be taken for the storage and transport of samples. If rapid transport within 48 hours to the laboratory (in transport medium at 4 °Celsius) is not guaranteed, samples shall be stored and then transported in dry ice at 70 °Celsius.]

Textual Amendments

H7

F1 Substituted by Commission Decision of 17 October 2005 amending Decision 2005/464/EC on the implementation of survey programmes for avian influenza in poultry and wild birds to be carried out in the Member States (notified under document number C(2005) 3960) (2005/726/EC).

E. LABORATORY TESTING

Laboratory tests shall be carried out in accordance with the diagnostic procedures for the confirmation and differential diagnostic of avian influenza (AI) set out in Annex III to Directive 92/40/EEC (including examination of sera from ducks and geese by haemagglutination-inhibition (HI) test. However, if laboratory tests not laid down in Directive 92/40/EEC, nor described in the OIE Terrestrial Manual, are envisaged, Member States shall provide the necessary validation data to the CRL, in parallel to submitting their programme to the Commission for approval. All positive serological findings shall be confirmed by the National laboratories for avian influenza by an haemagglutination-inhibition test, using designated strains supplied by the Community Reference Laboratory:

H5 (a)	Initial test using Duck/Denmark/64650/03 (H5N7)
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- (b) Test all positives with Ostrich/Denmark/72420/96 (H5N2) to eliminate N7 cross reactive antibody.
- (a) Initial test using Turkey/England/647/77 (H7N7)

Changes to legislation: There are currently no known outstanding effects for the Commission Decision of 21 June 2005 on the implementation of survey programmes for avian influenza in poultry and wild birds to be carried out in the Member States (notified under document number C(2005) 1827) (Text with EEA relevance) (2005/464/EC), ANNEX. (See end of Document for details)

(b) Test all positives with African Starling/983/79 (H7N1) to eliminate N7 cross reactive antibody.

[^{F2}F. LIST OF WILD BIRD SPECIES PRESENTING HIGHER RISK IN RELATION TO AVIAN INFLUENZA⁽²⁾

	Latin name	English language name
1.	Anser albifrons	White-fronted goose
2.	Anser fabalis	Bean goose
3.	Anas platyrhynchos	Mallard
4.	Anas strepera	Gadwal
5.	Anas acuta	Northern Pintail
6.	Anas clypeata	Northern Shoveler
7.	Anas Penelope	Eurasian Wigeon
8.	Anas crecca	Common Teal
9.	Anas querquedula	Garganay
10.	Aythya ferina	Common Pochard
11.	Aythya fuligula	Tufted duck
12.	Vanellus vanellus	Northern Lapwing
13.	Philomachus pugnax	Ruff
14.	Larus ribibundus	Black-headed gull
15.	Larus canus	Common gull]

Textual Amendments

F2 Inserted by Commission Decision of 17 October 2005 amending Decision 2005/464/EC on the implementation of survey programmes for avian influenza in poultry and wild birds to be carried out in the Member States (notified under document number C(2005) 3960) (2005/726/EC).

Changes to legislation: There are currently no known outstanding effects for the Commission Decision of 21 June 2005 on the implementation of survey programmes for avian influenza in poultry and wild birds to be carried out in the Member States (notified under document number C(2005) 1827) (Text with EEA relevance) (2005/464/EC), ANNEX. (See end of Document for details)

(**1**) OJ L 146, 11.6.1994, p. 17.

(2) [^{F2}All naturally occurring wild birds species in the Community, including the the species listed in the table in this part, are covered by the protection regime of Directive 79/409/EEC on the conservation of wild birds and therefore full regard shall be taken of the requirements of this Directive in any surveillance for avian influenza.]

Textual Amendments

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