A DELIVERY PLAN FOR VACCINATION AGAINST AVIAN INFLUENZA

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SECTION A – AIMS AND OBJECTIVES

A.1 AIM OF THIS DELIVERY PLAN

Our policy remains that we would not vaccinate poultry in advance of an avian influenza outbreak, nor would we use it as an immediate disease control response. Early reporting, rapid action, biosecurity, culling and surveillance remain the most effective ways of protecting against and controlling an avian influenza outbreak. This is because currently available vaccines have a number of limitations. In particular, although vaccines are able to reduce mortality, it is possible that some vaccinated birds would still be capable of transmitting the disease if they became infected whilst not displaying symptoms; this would increase the time taken to detect and eradicate the virus.

However, we are committed to being fully prepared to vaccinate, to enable a decision to be made to do so. To that end we have ensured access to vaccine and, as part of good contingency planning, we are developing this document which outlines guidelines for any plan to deliver an AI vaccination programme. This plan would have to be considered by the European Commission in the event of a decision to vaccinate against highly pathogenic AI.

In the event of an outbreak of AI, we may issue a requirement to house, or otherwise separate, poultry and other captive birds from wild birds on either a local, regional or nationwide basis. However, it may not be practicable for certain bird keepers to house or otherwise separate their birds on a long-term basis, for economic (e.g. free range poultry), welfare (e.g. waterfowl) or other practical reasons. Owners of these birds who fall under the housing requirement could then be able to apply for a licence to vaccinate their birds, which may then be allowed to be kept outdoors after a specified period, depending on the circumstances and provided that the keeper could demonstrate that his birds were kept at the highest levels of biosecurity. This would be a voluntary use of vaccination, as the keeper would be choosing to vaccinate his birds.

There may, alternatively, be circumstances where we might compulsorily vaccinate poultry or other captive birds as part of our disease control response. This would involve notifying bird keepers in a certain area that they must vaccinate their birds.

There are certain differences in the way that voluntary and compulsory vaccination would be carried out, and these differences are reflected in the plan.

It is important to note that any decision to vaccinate would be taken in the context of the factors listed above, and based on expert veterinary, epidemiological and scientific advice, given the circumstances existing at the time. Therefore there are a number of areas in this plan where it is not possible to give a definitive position until we are aware of those circumstances.

A.2 BIRD GROUPS

The groups of birds that we would vaccinate/permit the vaccination of would depend on circumstances at the time.

This delivery plan is intended to cover vaccination in:
• chickens, turkeys and other species belonging to the Galliformes order
• ducks, geese and other species belonging to the Anseriformes order.

For the purposes of this plan, we would consider the vaccination of the following groups of poultry or other captive birds:

a) commercial free range poultry
b) non-commercial hobby flocks, including those kept for the purposes of conservation and breeding.

We have assumed in this plan that we would not vaccinate/permit the vaccination of commercial housed poultry or broilers, housed captive birds, pet shops with captive birds due to the ability to provide good biosecurity or the short lifespan of certain groups of birds. However, in the interests of flexibility, we have not ruled out the vaccination of birds other than commercial free range poultry and non-commercial hobby flocks.

A.3 THE LEGISLATIVE BASIS


Articles 53 and 56 of the AI Directive lay out broadly similar requirements of any plan, for emergency and preventive vaccination respectively, that must be submitted to the Commission for approval. Most of these requirements are covered in this plan, although there are certain requirements that would depend on the circumstances at the time and could only be included at the time any decision to vaccinate was taken, including:

• a clear description of the reasons for vaccination, including the disease history;
• the area, number and type of holdings and approximate number of birds to be vaccinated;
• the envisaged duration of the vaccination programme;
• the specific provisions on the movements of vaccinated birds.

Where such information would need to be included at the time, this is indicated in italics in this plan.

Article 7 of the Avian Influenza (Preventive Measures) (England) Regulations 2006, and its equivalent legislation in Scotland and Wales, requires all premises with 50 or more poultry or other captive birds to register their birds on the GB Poultry Register. This Register provides a database with information that feeds into the Diseases of Poultry Disease Control System (DPDCS), which is used to manage any disease outbreak in the UK. DPDCS will be replaced by the Business Reform Programme (BRP) which is currently scheduled to come on line at the end of 2008.
Article 5 of the Avian Influenza (Preventive Measures) Regulations (Northern Ireland) 2007 requires the keeper of poultry or other captive birds, excluding any caged pet birds kept within their owner’s home, to register with the Northern Ireland Department of Agriculture and Rural Development (DARDNI) on the NI Bird Register, which is kept on the Animal Public Health Information System (APHIS), and used to manage and control avian disease in Northern Ireland.

A.4 THE RISK

[To be detailed at the outbreak OR risk time along with the required epidemiology]

The UK has areas with substantial waterways and is on migratory flyways. It has some poultry premises close to bodies of water where migratory birds may gather, and some located in areas with a high numbers of migratory birds.

The poultry on UK sites are kept in a variety of different environments. These are dictated by factors such as the site itself, the species of bird kept, and management issues such as the ease and practicality by which particular groups of birds can be housed. Consequently, the different groups of birds will be exposed to different levels of risk.

UK legislation and contingency planning ensures that there is a good awareness of the biosecurity measures and levels of preparedness required. These have been promoted continually since the risk from AI within the EU was acknowledged. Biosecurity is important to protect flocks from a variety of diseases, and therefore has many benefits beyond the threat of highly pathogenic AI.

A.5 NUMBERS OF BIRDS IN UK POULTRY INDUSTRY

According to the GB Poultry Register as at 7 March 2007, there are 23,982 premises with a total of 257,189,969 birds in Great Britain. Of these, a total of 13,049 premises (54%) are registered as having possible outdoor access with a total of 41,703,943 birds.1

According to APHIS as at 30 March 2007, there are 5,891 premises with a total of 26,549,838 birds in Northern Ireland. Of these, a total of 3,865 premises (65%) are registered as having possible outdoor access with a total of 7,899,163 birds.

1 A premises is deemed as having possible outdoor access if the premises had a registered housing type of “captive outdoors”, “free range”, “organically reared”, “coop access” or a combination of these five housing types for any of the species kept. However, as many premises have more than one type of housing, it is likely not all of the birds reported here will be kept outdoors. Hence the numbers of birds reported here can be considered to be the maximum number of birds on the GB Poultry Register which may have outdoor access.
SECTION B – DELIVERY OF VACCINATION

B.1 TYPE OF VACCINE

The UK has obtained a contingency supply of 10 million doses of Intervet Nobilis H5N6/H7N7 vaccine, which has a Marketing Authorisation from the Veterinary Laboratories Agency, is inactivated, suitably formulated and contains a neuraminidase type that enables the application of the DIVA (Differentiating Infected from Vaccinated Animals) principle.

B.2 AREA IN WHICH VACCINATION WILL BE CARRIED OUT

The area would depend on circumstances at the time, but for the purposes of this plan will be referred to as the Avian Influenza Vaccination Zone (AIVZ).

[Area and approximate number of vaccinating holdings/birds to be detailed at the outbreak OR risk time]

B.3 PERIOD OF VACCINATION PROGRAMME

The programme will continue until such time as a risk assessment states that it is not necessary. This will depend on circumstances and will be confirmed at the time.

B.4 VACCINATION FREQUENCY

The primary vaccination will consist of two inoculations given six to ten weeks apart. Full efficacy of vaccine protection will be established 14 days after the second inoculation and we would therefore require vaccinated birds to be housed or otherwise separated from wild birds until this period has passed.

Protection is provided for up to 12 months after the second inoculation. Thereafter, booster vaccinations would be allowed if a risk assessment states that the vaccination programme should continue.

B.5 IDENTIFICATION OF VACCINATED BIRDS AND PREMISES

From the point of view of monitoring and epidemiological assessment, premises with vaccinated birds must be able to be readily distinguished from premises with non-vaccinated birds. This requires an adequate registration system, which will also allow us to monitor the location and movement of vaccinated birds at both a local and national level.

In Great Britain, owners of premises with more than 50 birds must already be registered on the GB Poultry Register so their information would also be recorded on the DPDCS or BRP. Owners of premises with less than 50 birds are not legally required to register but to be eligible for vaccination they must first register on the GB Poultry Register so their information could be transferred to the relevant system. In Northern Ireland all bird owners are required to register on the NI Bird Register, which is kept on APHIS.
Information on the birds that have been vaccinated and subsequent movements could be recorded on either of these systems, based on a template spreadsheet which has already been prepared.

Depending on the circumstances in which a decision to vaccinate were made, we may require small flocks (e.g. under 50) or birds which are being exported to be individually identified, with larger flocks (e.g. over 50) identified only at a flock level but with a high degree of control. However, our role would be limited to specifying the form of identification needed. The keeper would be responsible for purchasing, obtaining and applying that form of identification.

The Food Standards Agency advise that the use of vaccination would not present any health risks for humans on consumption of the meat or other products from vaccinated birds. Nevertheless, depending on the circumstances, birds and products from vaccinated birds might NOT be eligible to be exported outside the UK.

B.6 UNDERTAKING THE VACCINATION

Once we have issued the bird keeper with a licence/notification to vaccinate their birds, the vaccination delivery procedure would be as follows:

- The bird keeper must inform their local Animal Health Office (in GB) or Divisional Veterinary Office (in Northern Ireland) of the name of the Private Veterinary Surgeon (PVS) who will vaccinate their birds, and the age and number of birds to be vaccinated.
- That PVS will then receive written authorisation to permit them to source the necessary quantity of vaccine via their normal wholesaler supply chain.
- The birds will then be vaccinated either by, or under the direction of, the PVS.
- The owner and PVS must sign a declaration that the vaccination has taken place (see Section B.12 for further information).

Depending on the circumstances, we may require further information (e.g. supplying a map with the location of vaccinated birds and sentinels) or restrictions (e.g. keeping litter or other waste from vaccinated birds on the premises). This would be detailed in a statement made at the time.

B.7 MOVEMENT RESTRICTIONS

Movement of vaccinated birds would depend on circumstances at the time, but would be prohibited until such time as they were allowed to move and would be recorded. Conditions for movement could include:

- Vaccinated birds could only be moved directly to a designated slaughterhouse;
- Or, exceptionally, to other premises after meeting specified veterinary requirements (i.e. PCR testing at 95 percent confidence of detecting a five percent or greater prevalence of infection). Once at the new premises, we might then require further pre-movement testing before they could be moved again.

In this way, apart from any other movement restrictions in place in protection zones and surveillance zones, wild bird risk areas or other designated areas, vaccinated
birds can be safely moved with accompanying paperwork for slaughter, private sale or showing purposes. These restrictions would remain in place until further notice.

B.8 LOCATION

The vaccination must be carried out at the address where the birds are registered as being kept. The location of these premises will be recorded on a system such as a dedicated spreadsheet or the BRP.

B.9 SUPERVISION

The vaccination programme will be under the supervision and responsibility of the competent authority (either Defra or the relevant devolved administration). The supervision conditions would depend on the circumstances at the time, but may include:

- The nominated PVS must supervise the vaccination, within the framework of the legislation and according to the methods described by the competent authority and the vaccine manufacturers.
- Animal Health (in GB) or the Veterinary Service (in Northern Ireland) would, under the responsibility of the competent authority, carry out random checks on the implementation of the vaccination programme, including checking the use of vaccine, distribution and declarations.
- After the vaccination is completed, Animal Health or the Veterinary Service would check the doses of vaccine ordered against the numbers of birds vaccinated by auditing the returned vaccination declarations.

B.10 MONITORING

Wild bird surveillance

Targeted wild bird surveillance in the UK is ongoing and would continue during any time of increased threat.

Clinical monitoring

In premises containing vaccinated birds, the PVS would be responsible for maintaining high standards of clinical monitoring. However, there may be a need for additional monitoring in light of the possibility of virus being present without any obvious clinical signs. This would depend on the risk assessment at the time.

PCR testing

PCR testing at 95 percent confidence of detecting a five percent or greater prevalence of infection can detect the presence of virus in the absence of clinical signs. The application of testing at this level would depend on epidemiological assessment at the time, and may already be ongoing in protection and surveillance zones, wild bird risk areas or other designated areas. It may also be required in sentinels or before movement of vaccinated birds, depending on the circumstances.
Serological monitoring

Serological monitoring may also need to be undertaken, depending on a risk assessment at the time, but it is not envisaged that it would be used as an immediate requirement.

Sentinels

There can advantages in premises having vaccinated birds kept alongside non-vaccinated birds (sentinels) and we may therefore require their use. These non-vaccinated birds should be particularly susceptible to disease and show the clinical signs that allow the tracing of active infections that may have otherwise gone unnoticed. These birds may also detect disease in vaccinated birds which do not show disease easily, e.g. ducks.

Sentinels should be marked at the point of vaccination with a unique identification that distinguishes them from vaccinated birds and they should be fully integrated with vaccinated birds to be effective. Full advice and guidance will be issued at the time and is in preparation.

The ideal choice of particularly susceptible bird to be used as a sentinel is a domestic chicken. Chickens would be subject to clinical monitoring by the keeper and deaths reported to the PVS. Depending on the circumstances at the time, or if less susceptible birds are used, then sentinels may be subject to regular testing by PCR.

Any concerns over the health of any bird, including suspicion of notifiable disease, should be reported immediately by the keeper to their PVS. If the PVS suspects AI or any other notifiable disease, they must inform Animal Health or the Veterinary Service who will carry out a veterinary enquiry.

B.11 OUTBREAK OF DISEASE WITHIN VACCINATED PREMISES

It is important to note that if there is an outbreak of AI within a premises containing vaccinated birds, birds on the infected premises are still legally required to be culled, i.e. vaccination will not automatically lead to the lifting of control measures. There may be a derogation for certain birds (e.g. those kept for scientific or conservation purposes, or officially registered rare breeds) but only if this derogation does not compromise disease control and certain other conditions (e.g. housing, surveillance) are met.

B.12 VACCINATION LICENCE OR NOTIFICATION

The bird keeper will be issued with a licence (voluntary vaccination) or notification (compulsory vaccination) to vaccinate their birds. The conditions listed in the documentation will depend on the circumstances but will most likely require that:

- all birds must receive the full primary course of two inoculations
- vaccinated birds must be housed or otherwise separated until 14 days after the second inoculation
- no birds can be moved in the period between the first and second inoculation
• vaccinated birds can not be moved without authorisation from the competent authority
• for all birds that require unique identification, that identification must be applied after the first inoculation and never removed
• all effort must be made to prevent the escape of vaccinated birds
• records must be kept for a specified time.

B.13 DECLARATIONS

Following vaccination, the PVS and bird keeper will complete a declaration confirming that the vaccination has taken place. This declaration must then be sent to Animal Health or the Veterinary Service and will contain as a minimum the following information:

• the name, address and details of the vaccinating veterinary practitioner
• the name and address of the owner of the poultry holding
• the location where the birds were/are housed and vaccinated
• the number of birds of each species that are vaccinated, along with the number of vaccine doses used against the number ordered
• confirmation that unused doses have been destroyed by an approved method.

B.14 BIOSECURITY AND EDUCATION

The owner will receive a pack, including information on the advantages and disadvantages of vaccination, and any likely costs. Defra and the devolved administrations regularly send information on biosecurity measures to poultry keepers which is available on-line, and this would be repeated during a time of increased threat. Information would be made available to the owners and veterinary organisations on the requirements of the vaccination delivery plan.

B.15 PUBLIC HEALTH ASPECTS

Any vaccination delivery programme would be undertaken in close liaison with the Health Protection Agency and Health and Safety Executive. The public health aspects have been assessed and are dependent on the disease risk at the time.

B.16 REPORT TO THE COMMISSION

At the end of the vaccination programme, a report will be provided to the Commission containing detailed information on how the vaccination plan was implemented.

B.17 EXIT STRATEGY

The vaccination programme and post-vaccination surveillance will continue until such time as a risk assessment states that it is not necessary. Also depending on risk assessment at the time, we may need to continue to require post-vaccination surveillance for a period after the end of the programme.