INFORMATION NOTE ON “AVIAN INFLUENZA AND MIGRATORY BIRDS”

THIS NOTE HAS BEEN COMPILED BY THE NATURE AND BIODIVERSITY UNIT OF DG ENVIRONMENT IN CONSULTATION WITH THE ORNIS SCIENTIFIC WORKING GROUP

IT WILL BE SUBJECT TO REVISION AND UPDATING IN LIGHT OF ANY RELEVANT FUTURE DEVELOPMENTS ON THIS SUBJECT

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How prevalent is avian influenza in wild birds?

Avian Influenza (or bird flu) is a highly contagious viral infection which can affect all species of birds and can manifest itself in different ways depending on the pathogenicity of the virus involved and on the species affected. Avian influenza is widespread in populations of wild birds, but typically has low lethality (so-called Low Pathogenic Avian Influenza - LPAI). However, there is concern about the fact that the Asian strain of a highly virulent form of this virus (Highly Pathogenic Avian Influenza - HPAI - of the form H5N1) has been recorded in wild birds in different parts of the world (Europe, Asia, Africa). This has affected especially waterfowl (ducks, geese and swans) but also has affected a wide range of species, including birds of prey.

Why is Avian Influenza of concern?

HPAI H5N1 has a number of potential consequences. It can result in significant mortality of wild bird populations (ecological aspect). It has also serious consequences for commercial production of domestic poultry (economical aspect). The HPAI H5N1 strain further constitutes a serious potential risk for humans (public health aspect). To date there have been no recorded instances of the disease being transmitted from infected wild birds to humans in Europe\(^1\). Nor is the H5N1 virus strain considered at present to be contagious between people. Most human cases to date have been linked to close contact with domestic poultry, which appear to be particularly susceptible to the virus\(^2\). However, there is the theoretical potential that HPAI may mutate to a form that could spread between humans resulting in a global influenza pandemic. The World Health Organisation (WHO) has issued warnings about such a future pandemic [http://www.who.int/csr/disease/avian_influenza/en/index.html](http://www.who.int/csr/disease/avian_influenza/en/index.html). It is recognised that this is an evolving situation which could quickly change.

Are migratory birds involved in the spread of Avian Influenza?

There are a number of potential ways by which H5N1 can be spread within and between countries. These include the movement of poultry (and poultry products), the movements of caged birds for trade and movements of migratory birds. The pattern of recent outbreaks during February and May 2006 of H5N1 in 13 Member States of the EU provides strong supportive evidence that migratory waterbirds are capable of transmitting the virus over long distances.

Were recent outbreaks of Avian Influenza in the EU predicted?

H5N1 is considered to originate in south-east Asia, where it has been recorded since 2003. It spread to Kazakhstan and southern Russia in summer and turned up in Turkey, Romania and western Russia in autumn 2005. It is not entirely clear to what extent migrating wild birds were involved in this westward spread of the virus.

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\(^1\) There has been a case of confirmed direct transmission between wild swans and people in Azerbaijan.

\(^2\) Transmission is considered to be promoted in domestic flocks due to the high density of bird which increases the risk of close contact with faecal and other secretions containing the virus. In places where domestic flocks mix freely with wild birds (as appears to be the case in SE Asia) the disease can be transmitted to and from migratory waterbirds more easily.
The scientific evidence initially suggested that there would be a relatively low risk of an outbreak of H5N1 in the European Union this past winter, with the possible exception of Greece. This was due to the fact that infected areas were mainly along a south-eastern flyway of migration that were considered to take birds mainly through the middle-east into Africa. It was considered that the EU would be at higher risk in spring when birds migrate northwards to the EU from Africa after being in contact with infected birds of Asian origin through direct or indirect contact with them on the African wintering grounds.

The outbreaks took place in late winter. These may have resulted from cold weather, resulting in displacement of waterbirds or them being subject to poor body condition. There does not appear to have been a higher mortality rate of wild birds affected by the outbreaks. However, this situation requires further assessment.

**What is the Commission doing about Avian Influenza?**

Since the emergence of this problem the Commission has worked very closely with the Member States to put in place an effective response and preparedness strategy. This is mainly the responsibility of DG SANCO. Through its Standing Committee on the Food Chain and Animal Health, it has introduced a series of legislative measures dealing with biosecurity and aimed at reducing the risk of contact between wild birds and poultry. DG SANCO also provides information and awareness about this work of the Commission on avian influenza. They have a dedicated web site to this subject


This includes regularly issuing press releases, especially in response to new outbreaks and biosecurity measures taken by the SCFCAH.

There is also increased surveillance of wild birds and poultry for H5N1 being undertaken in different Member States.

Other services of the Commission and Community bodies are also involved. DG RTD is allocating funding to increase research on Avian Influenza. A risk assessment being carried out by the European Food Safety Authority (EFSA) to produce a ‘Scientific opinion on migratory birds and their possible role in the spread of highly pathogenic avian influenza’.

**What is the role of DG ENV in avian influenza?**

DG Environment, which is the main Commission service dealing with issues relating to wild bird conservation, is actively supporting the ornithological elements of this work.

One of the key issues in this regard is the need for good quality scientific information on the migration routes and important concentration areas of wild birds, to assist with the risk assessments. There is already a large amount of data from bird census and ringing schemes in Europe but much of this has not been adequately analysed. DG ENV has funded a study contract with Wetlands International/EURING for a preliminary assessment of relevant ornithological information. Part of the contract aims at developing a methodology/approach to quickly generate scientific information to respond to a potential outbreak at particular sites.

There is also a global wildlife conservation dimension to Avian Influenza. Different international conventions ratified by the European Community are also involved in the debate.
on avian influenza. DG ENV is the main responsible service in the Commission to deal with these conventions. These include the Convention on Migratory Species (CMS), the African Eurasian Waterbird Agreement (AEWA) and the Convention on Biological Diversity. An expert meeting of different bodies concerned with the role that wild birds are playing in the possible transmission of Avian Influenza was being organised by UNEP in cooperation with CMS and AEWA and took place from 10 – 11. April 2006 in Nairobi, Kenya.

http://www.iisd.ca/ymb/ais/ymbvol123num1e.html.

**Is the Birds Directive relevant to Avian Influenza?**

As migratory birds are involved in the spread of the virus this has important implications for the conservation of wild birds under Council Directive 79/409/EEC on the conservation of wild birds. The Birds Directive provides a legal framework for the protection of all bird species that naturally occur in the European territory of the Member States.

With the exception of the hunting of listed species which may be hunted in accordance with rules defined in the Directive outlaws the deliberate killing or capture of wild birds, the deliberate destruction of or damage to their nests and eggs, the deliberate disturbance of the birds, particularly during the period of breeding and rearing (in so far as this would be significant).

Member States may derogate from the protective requirements of the Directive only where there is no other satisfactory solution, and only for specified reasons including ‘in the interests of public health and safety’ and ‘for the protection of flora and fauna’.

**Is the culling of wild birds an acceptable practice to deal with Avian Influenza?**

It cannot be ruled out that the derogation provisions (defined under Article 9 of the Birds Directive) might be invoked by a Member State in the case of a proven outbreak of Avian Influenza in extremely limited cases where there would be scientific evidence to demonstrate that this was the most effective means to totally control an outbreak. This could only be judged on a case by case basis and may not entail non-lethal removal of birds from infected areas.

However, any suggestion that hunting be allowed to cull birds in outbreak areas has little support and international bodies have strongly argued against this as it is likely to be counterproductive and may lead to greater dispersal of the problem. WHO and FAO have previously advised that control of AI in wild birds is not feasible and should not be attempted.

The position of the Commission is clear that the indiscriminate killing of wild birds, especially as a precautionary measure to prevent the spread of avian influenza, is neither advisable nor justifiable and could aggravate the situation by resulting in the dispersal of potentially infected birds. Therefore the Commission, on the basis of current understanding of the virus, does not believe that preventative measures are eligible for derogations under Article 9 of the Birds Directive.

**What are the implications for hunting under the Birds Directive?**

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Hunting is a legitimate activity under the Birds Directive which provides a framework for its regulation under national laws. Through their activity hunters come into close contact with wild birds and thus are at greater risk if these birds are infected by avian influenza.

Several precautionary and response biosecurity measures that have already been taken to deal with avian influenza have implications for hunting. These have included:

- In high risk areas, which are defined by the Member States, the use of live decoys are banned for hunting, with the exception of the use of such birds for the purpose of virological sampling surveillance work
- In areas of outbreaks where protection zones (3 km radius) and surveillance zones (10 km radius) there is a prohibition of hunting

It should be noted that hunters, with the knowledge of their local area, also play an important role in the overall monitoring and surveillance for avian influenza, by providing samples of birds for testing for the virus as well as in alerting the authorities to any unusual incidents of mortality of birds

**What is the role of the competent conservation authorities?**

It is for each Member State to define who is responsible for dealing with avian influenza. DG ENV is working to ensure that competent nature authorities in Member States are as involved as possible, especially as regards issues related to implementation of the Birds Directive. This would help ensure the provision of necessary advice in relation to wildlife matters, together with other ornithological bodies or monitoring and surveillance of wild birds in relation to AI is to sufficient ornithological standard.

**What is the present level of surveillance and reporting on avian influenza?**

Countries subject to avian influenza outbreaks must report this to the OIE (World Organisation for Animal Health) which has a web site that makes such information publicly available [http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm](http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm)

Surveillance to assess the incidence of avian influenza in wild birds has been in different Member States since July 2005 with financial support of the Commission.

It is essential to ensure good quality and quantity of ornithological information to enable a proper assessment of the role of wild birds in the spread of the disease. This is best achieved through full engagement of ornithological expertise in relation to the planning and implementation of national and regional surveillance programmes.

**What are the present priorities for DG ENV in relation to highly pathogenic avian influenza and wild birds?**

- Continue to provide support and ornithological advice to DG SANCO which is lead Commission Service on AI
• Continue to monitor situation in relation to implementation of wild birds directive and provide advice as appropriate.

• Liaise with Member States conservation authorities to strengthen ornithological inputs into national strategies for AI preparedness

• Liaison with international conservation bodies in relation to wildlife conservation elements of Avian Influenza

• Support the compilation of ornithological information relevant to Avian Influenza

• Help ensure that there are appropriate ornithological surveillance systems in place.