

Urgent preliminary assessment of ornithological data relevant to spread of Avian Influenza in Europe

Background and context

This Service contract for the Environment Directorate General (DG ENV) aimed to provide the most up to date and best available ornithological information on wild birds considered to present a higher risk in relation to the spread of avian influenza to the European Union. This subject is of direct interest to DG ENV, especially in the context of Council Directive 79/409/EEC on the conservation of wild birds.

The study was launched in autumn 2005 prior to any outbreak of the Asian Strain of the Highly Pathogenic Avian Influenza H5N1 in the European Union. At that time there was already concern that migratory birds from infected areas to the east, might carry this virus to the European Union. It was therefore recognised that there was a need to have best available ornithological information on this subject.

The Commission, through the Consumer and Health Protection Directorate General (DG SANCO) which is the lead service in relation to Avian Influenza, was already responding at this time to the increased risk of AI being spread by migratory wild birds, including working closely with Member States to step up surveillance of the incidence of AI in different migratory species¹. At a meeting of the “Standing Committee on the Food Chain and Animal Health working group” on 6 September 2005 a provisional list of 15 species of water birds that present a higher risk in relation to avian influenza had already been presented.

The risk of spread of Avian Influenza from migratory birds was also highlighted at a meeting of 29 September 2005 of the Scientific Working Group of the Committee for adaptation to scientific and technical progress under Council Directive 79/409/EEC (ORNIS Committee) at which the national delegates expressed support for Commission action to compile ornithological information relevant to this threat.

The key objective of the present contract was therefore to urgently carry out a preliminary assessment of available ornithological data on European migratory birds, considered to be at higher risk from HPAI (especially H5N1), especially with regard to identifying migratory routes, concentration areas and high risk areas.

Two organizations, Wetlands International² (WI, www.wetlands.org) and the European Union of Bird Ringing³ (EURING, www.euring.org) were considered to be

¹ Details about the work of DG SANCO on avian influenza can be found on the web at http://europa.eu.int/comm/food/animal/diseases/controlmeasures/avian/index_en.htm.

² Wetlands International organizes and co-ordinates actions for the monitoring and protection of waterbirds, and their habitats, all around the globe. They work with an extensive network of experts, including some 18 Specialist Groups and very well developed networks of observers and contacts in the field. On behalf of the Ramsar Convention a database is managed with information on 1200 wetlands which qualify as “sites of international importance”. In January each year the International

uniquely placed to provide this evaluation of the movements of migratory birds and the connectivity between waterbird populations. The work was undertaken by Wetlands International and EURING between December 2005 and May 2006.

Objectives of contract

The key objective was to carry out a preliminary assessment of available ornithological data on European migratory birds, considered to be at higher risk from HPAI (especially H5N1), especially with regard to identifying migratory routes, concentration areas and higher risk areas. This was to be based on an evaluation of best available ornithological data largely emerging from count data of Wetlands International and bird ringing data of EURING. The evaluation also aimed at the development of methodological approaches that could be quickly applied to provide information in relation to any outbreak of Avian Influenza that may occur in the EU.

In this context the following key tasks were undertaken by the contractor.

- 1. Identification of risk migratory species that pose a relatively high risk of spreading H5N1 along their migration route to the European Union***
- 2. Identification of migratory routes from ringing recovery data of species that may potentially transmit AI***
- 3. Identification of wetland sites where so-called higher risk species mix and concentrate in large numbers during migration and winter.***
- 4. Development and testing of a format for the rapid assessment of ornithological data at the level of wetland sites with a view to preparedness for a possible outbreak of H5N1***

Experts of the ORNIS Scientific working Group were consulted in relation to the identification of higher risk species, to ensure that the expert ornithological perspective of different Member States was taken into account in relation to this assessment.

Waterbird Census (IWC) is organised, which includes more than 20,000 sites in more than a hundred countries. In Europe alone more than 20 million waterbirds are counted each year. The IWC databank is site-based and provides important information on the distribution and numbers of waterbirds.

³ EURING has collected data on the movements of individually marked birds for decades. EURING was founded in 1963 to ensure co-operation between ringing schemes in all aspects of scientific bird ringing across Europe, and to promote the use of ringing data for management and conservation of bird populations. This is facilitated by a standard protocol for data transfer and the creation of the EURING DataBank (EDB) <http://www.euring.org/edb/index.htm>, which contains records from the member schemes of individual birds that have been ringed across Europe, including Russia, and subsequently found (alive or dead). The EDB currently comprises more than 2.5 million records for over 250 species from 40 individual national schemes, so provides an invaluable resource for addressing questions pertaining to bird movements.

Wider context of avian influenza and wild birds

The information from this contract represents the most comprehensive scientific overview of ornithological data relevant to avian influenza and migratory birds that were considered to be at higher risk of spreading H5N1 to the European Union.

It represents an important scientific contribution to assist with measures of risk assessment of the European Community in relation to avian influenza and wild birds.

The work emerging from the contract in relation to higher risk migratory species has already contributed to the work of the European Food Safety Authority (EFSA) which was requested by the European Commission to provide a Scientific Opinion on this subject⁴. It should also prove to be useful in relation to further updates of this Opinion.

Likewise, it is also highly relevant in relation to the ongoing and future surveillance of wild birds for avian influenza, which is being co-ordinated within the European Commission by DG SANCO, and is being used to help identify higher risk species for sampling in 2007 and providing a good scientific basis for further assessments.

⁴ Details of the EFSA scientific opinion and report can be found at http://www.efsa.eu.int/science/ahaw/ahaw_opinions/1484_en.html