



## **REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON AVIAN INFLUENZA<sup>1</sup>**

**Paris (France), 25–27 June 2018**

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The OIE *ad hoc* Group on avian influenza (the Group) met at OIE Headquarters in Paris on 25–27 June 2018.

Dr Matthew Stone, Deputy Director General of the OIE, on behalf of Dr Monique Eloit, Director General of the OIE, welcomed members of the Group and the representatives from the Scientific Commission for Animal Diseases (Scientific Commission) and the Terrestrial Animal Health Standards Commission (Code Commission) and thanked them for their support for the OIE in this important area of work.

Dr Stone commented on the important task of the Group to review and align the *Terrestrial Animal Health Code (Terrestrial Code)* chapter on infection with avian influenza viruses, and the expected outcome of the Group should be an in-depth review of the chapter.

Dr Stone noted that avian influenza is not a disease for which the OIE officially recognises freedom status. However, he emphasised the work to strengthen and increase the transparency and visibility of the OIE procedure for the self-declaration of freedom from diseases. He highlighted that Members need to comply with OIE international standards should they want to self-declare freedom from avian influenza, and that the vast majority of such declarations to date from Member concern avian influenza, reinforcing the need for clear standards.

The members of the Group and other participants are listed at [Annex II](#).

### **1. Adoption of the agenda**

The agenda adopted is at [Annex I](#).

### **2. Summary of outcomes of the first meeting of the Group**

The OIE Headquarters reminded the Group of the proposals for the revision of the definitions of ‘avian influenza’ and ‘poultry’ at its first meeting, in December 2017. The Group had before it the comments of Member Countries and took note of the summary of the comments received on the proposed text. The Group reconsider the proposed definitions along with Member Country comments, with the aim proposing further modifications for consideration by the Specialist Commissions at the September 2018 meetings.

The Group agreed to address substantive matters in relation to the revision of the current Chapter 10.4. on Infection with avian influenza viruses of the *Terrestrial Code*, entrusting the OIE Headquarters with any consequential drafting modifications.

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<sup>1</sup> Note: This *ad hoc* Group report reflects the views of its members and may not necessarily reflect the views of the OIE. This report should be read in conjunction with the September 2018 report of the Terrestrial Animal Health Standards Commission because this report provides its considerations and comments. It is available at <http://www.oie.int/en/international-standard-setting/specialists-commissions-groups/code-commission-reports/meetings-reports/>

### 3. Addressing Member Countries' comments on Chapter 10.4. Infection with avian influenza viruses

#### General comments

The Group noted that a wide range of comments were received on Chapter 10.4. from Member Countries regarding low pathogenicity avian influenza (LPAI), its notification requirements and the purposes of surveillance. The Group recognised the importance of effective surveillance and the sharing of information on the occurrence of LPAI through appropriate reporting, and the prevention and control of newly evolving threats from animal reservoirs.

The Group agreed on the importance of the sharing information on the occurrence of LPAI across disciplines and sectors as the key element in reducing the risk of zoonotic disease emergence for all subtypes of LPAI viruses and identifying means of managing the H5 and H7 LPAI mutation risks to high pathogenicity avian influenza (HPAI) viruses in order to better prevent or contain them.

On the other hand, the Group were of the view that, in light of the unjustified trade measures resulting from H5 and H7 LPAI outbreaks in some Member Countries, further elaboration of obligations in Member Countries might be warranted. The Group reiterated the importance of addressing the differences of risks between HPAI and LPAI in a factual and clear manner, while agreeing with sentiments that consultations with the scientific community would benefit the Code Commission in its work. Thus, the Group harmonised the terminology about the reporting throughout Chapter 10.4., ensuring that H5 and H7 LPAI should be taken into consideration in accordance with national priorities.

#### Detailed comments from Member Countries:

##### a) Proposed definition of 'avian influenza'

The Group noted that comments were generally supportive of the proposed approach for separating LPAI from HPAI and creating new articles in the same chapter dedicated to LPAI. However, some Member Countries raised concerns regarding a recommendation for six-monthly LPAI reporting, noting that six-monthly reporting contains less information, and could lead to less transparency. The Group was of the opinion that the full definition of LPAI also needed to be included in Chapter 10.4. to meet the intent of the chapter.

Dr Etienne Bonbon clarified that notification and reporting requirements prescribed in Chapter 1.1. of the *Terrestrial Code* apply to all listed diseases, including LPAI viruses, and any emerging diseases. In other words, all LPAI viruses identified not meeting the immediate notification requirements by default could be reported through six-monthly reports on the absence or presence and evolution of LPAI viruses. The Group agreed on the need to add a new point to the LPAI related article to reflect the importance of using reporting methods appropriate to the situation.

The Group noted the emergence of H9N2 virus infection reported in humans, and the widespread occurrence of this subtype in poultry, especially in Asia. The Group considered it would be more appropriate to be dealt with as an emerging disease rather than adding the subtype into the recommendations of the chapter.

The Group also noted that if the OIE developed an LPAI guideline for surveillance and control, then a reference to it in the *Terrestrial Code* may be a good solution to this problem. HPAI should be reported as before, but LPAI with H5 or H7 subtype with a significant epidemiology change or with other species affected should be reported through immediate notification.

##### b) Proposed draft revised definition of 'poultry'

The Group discussed at length the term 'backyard poultry' and considered whether it was possible to clearly define it. The conclusions reached during the first meeting were reaffirmed by the Group upon its consideration of removing the term 'backyard poultry' from the definition of 'poultry' noting that in many countries, the poultry sector was integrated in such a way that no clear separation could be made between different sectors. Due to the wide range of combinations of different types of production systems, the term 'backyard flocks' could not be defined.

The Group took note of the concerns expressed by Member Countries with respect to a perceived lack of clarity in the meaning of the term ‘self-consumption’. In particular, concerns were expressed regarding how to define the size of an operation or the scope of distribution covered by ‘self-consumption’. To avoid any confusion with regard to the use of that term, the Group agreed to delete the proposed text and add a new sentence at the end of the first paragraph to read as follows: “If birds are kept in a single household and their products are only used in the same household, these birds are not considered poultry”.

The modified phrase emphasizes that the birds are kept and consumed; and their products are used within the same household without having come into in contact with other birds. The Group determined that the term ‘household’ was more appropriate than that of ‘family’.

In response to a concern about uncertainty with respect to the placement of the phrase “all birds used for restocking supplies of game”, the Group decided to create a separate sentence out of the first paragraph and placed it between the first and third sentence in order to clarify that the all birds used for restocking supplies of game including birds used for breeding these types of birds are considered poultry.

The Group noted that general support had been expressed in the Group for a broad application of the revised definition of ‘poultry’ that could be applied to other disease-specific chapters such as Newcastle disease and *Salmonella*, in preference to dealing with specific situations. However, the Group noted that the extent to which the revised definition of ‘poultry’ should affect the Glossary definition of ‘poultry’ remained to be considered by the Code Commission.

#### **4. Developments since the last meeting of the *ad hoc* Group**

##### Incubation period

The Group recognised that the current definition of the incubation period as 21 days and its application to isolation period throughout the chapter could be unnecessarily risk averse, since 21 days already includes various considerations providing a safety margin. Dr David Swayne noted that the current incubation period of 21 days had been set based on Easterday *et al.* from the 10th edition of Diseases of Poultry.

“The incubation periods for the various diseases caused by these viruses range from as short as a few hours to 3 days in individual birds and up to 14 days in a flock. The incubation period is dependent on the dose of virus, the route of exposure, the species exposed, and the ability to detect clinical signs.”

The Group discussed the difference between animal level and flock level incubation periods, in particular in regard to notification and enumeration of cases, and noted the definition of incubation period in the Glossary. Because the epidemiological unit of concern is normally the flock, it was decided to make reference to ‘at flock level’. The incubation period for a flock of 14 days is usually cited in the literature.

The Group noted that the incubation periods for LPAI were unknown and unclear in certain animal species as clinical disease was not always produced. However, considering the importance of domesticated poultry populations in the epidemiology of avian influenza outbreaks, as well as zoonotic risks and mutation risks of H5 and H7 LPAI viruses, the Group considered that these circumstances would justify the inclusion of specific time reference in the chapter.

A study published by a Dutch group (M.E.H. Bos *et al.*, 2007) determined the incubation period of HPAI viruses at the flock level to be 11–15 days, which supports the 14 days referenced by Easterday *et al.* In the absence of conflicting scientific evidence, the Group decided to reduce the currently adopted incubation period of 21 days to 14 days, and specify this is applied at the flock level, for the purpose of the *Terrestrial Code*.

### Commodity-trade requirements

It was agreed that the articles presenting commodity requirements for “freedom from avian influenza” would no longer appear in the chapter, in accordance with the revised scope. The Group agreed that the H5 and H7 LPAI presented a lower risk than HPAI for spread through raw meat and table eggs, as was determined by a previous *ad hoc* group. However, the group agreed a risk assessment should be undertaken to support making changes to articles 10.4.14. and 10.4.19. on raw meat and table eggs.

The Group also agreed that if the industrial processing activities were standardised or known to inactivate the avian influenza virus, they could be called a commercial process. Recognizing the need to ensure consistency of the draft text in the area of safety interests, the Group agreed to change the text as suggested.

### Vaccination

The purpose of vaccination is to reduce the susceptibility of birds to infection and reduce shedding titre of virus if infection occurs. Vaccination can be an appropriate prevention and control tool for HPAI.

To support endemic countries’ efforts on the control of HPAI, and for the purposes of the *Terrestrial Code*, the Group decided to add a point about the purpose of implementing vaccination programmes and the implications for free status.

The Group noted that if vaccination was used in a country seeking to export poultry or poultry products, more information would be needed on the vaccination certificate or through the negotiation process than the date and type of vaccine used. The Group agreed that the exporting country would need to provide evidence supporting the absence of infection to the importing country.

The Group also noted that development and validation of appropriate tests and test systems to identify infections within vaccinated flocks (i.e. DIVA test) during peace time could support the use of vaccination as a risk reduction tool. A DIVA strategy could be serological (e.g. heterologous neuraminidase) or virological (e.g. RRT-PCR or antigen detection ELISA) tests used in vaccinated or sentinel birds.

### Surveillance

The Group discussed the frequency of testing to establish avian influenza free-establishments by explaining the concept of a period of restriction with a 14-day incubation period and either adding seven days or simply double the incubation period, which is the standard approach in other chapters. Following discussion, the Group decided to propose 28 days, concluded by doubling the 14 days of incubation period.

The Group noted that adding an article on how to reduce the period from three months from the last outbreak for self-declaration of HPAI freedom (as described in Article 10.4.4.) or the surveillance requirements for HPAI and H5 and H7 LPAI freedom would be a big challenge for the Group.

The Group also noted that the H5 and H7 LPAI free establishments article (10.4.32.) for export of high risk commodities such as live poultry, live birds other than poultry, day-old chicks and hatching eggs should be maintained.

The Group understood that many countries have a surveillance system to detect HPAI in wild birds, and guidance in the chapter would be useful.

Following the above consideration of epidemiological principles, the Group systematically considered the articles in the chapter and identified the associated changes that would need to be incorporated.

#### Article 10.4.1. General provisions

The Group confirmed the understanding of Member Countries that the draft revised text should maintain its general applicability to cover the scope of the chapter and the current epidemiology and address procedural issues that might arise, without differentiating the types of avian influenza. The Group decided to add an introductory paragraph to clarify the focus on HPAI, but that it also explains the overall scope of chapter including zoonotic potential and change of reporting requirements.

The Group noted that the importance of immediate reporting of:

- zoonotic influenza A viruses of any subtype; or
- epidemiological change in H5 or H7 LPAI viruses that indicates:
  - a move to increase virulence such as increase in basic amino acids at cleavage site or loss of glycosylation site at cleavage site; or
  - change in mammalian host species transmission; or
  - secondary spread among poultry species cases, or change in host species.

The Group also noted that the definition of avian influenza was proposed to be HPAI only and moved H5 or H7 LPAI to a new article within the chapter with measures to manage the risk of mutation from low to HPAI virus through tracking and reporting while avoiding unnecessarily restrictive trade practices.

#### Article 10.4.1bis. Safe commodities

The current version of the *Terrestrial Code* on avian influenza chapter does not provide a list of safe commodities, which differs from the approach that has been adopted for other disease chapters in the *Terrestrial Code*. The Group took note of the standardised process for certain commodities provided to the OIE by relevant industry associations.

The Group noted that if the industrial processing activities were standardised and known to inactivate the avian influenza viruses, the following products could be called safe commodities:

- heat-treated poultry meat in a hermetically sealed container with a Fo value of 3.00 or more;
- extruded dry pet food and poultry-based coated ingredients after extrusion;
- rendered meat and bone meal, blood meal, feather meal and poultry oil;
- feather and down processed by washing and steam-drying.

#### Articles 10.4.2. and 10.4.3. Determination of the status of a country, zone and compartment free from avian influenza

The Group noted that the existing chapter also dealt with H5 and H7 LPAI to encourage Member Countries to keep each other informed of their health status for viruses that have the potential to mutate from the low to high pathogenic state. The Group discussed the difficulty of demonstrating country or zone freedom, the fact that LPAI is ubiquitous or widespread would render surveillance needed for declaration of freedom unfeasible. In this respect, the Group proposed to remove the provisions related to LPAI free status from the chapter and to keep them only for notification and surveillance purposes.

The Group agreed that these articles describing a country, zone or compartment free from avian influenza could be deleted, while noting the stated intention above to introduce new articles addressing freedom from HPAI.

#### Article 10.4.3. Country or zone free from high pathogenicity avian influenza

The Group agreed that the words “based on surveillance in accordance with Articles 10.4.27. to 10.4.33.” should be inserted after the word “when” in paragraph 1 of the article to ensure consistency between that paragraph 1 and paragraph 2 of the same article that contained that qualifier. The Group also agreed that if infection has occurred in poultry in a previously free country or zone, the free status can be regained based on “the robustness of the stamping-out policy and the confirmation of absence of infection as demonstrated by specific surveillance undertaken in accordance with Article 10.4.XX.”

#### Article 10.4.3bis. Compartment free from high pathogenicity avian influenza

The Group agreed that the establishment of a compartment free from HPAI should follow the relevant requirements of this chapter and the principles in Chapters 4.3. and 4.4.

#### Article 10.4.3ter. Establishment of a containment zone within a country or zone free from high pathogenicity avian influenza

The Group agreed that an article could be drafted describing requirements for a containment zone within a country or zone free from HPAI in the event of limited outbreaks, which includes all epidemiologically linked outbreaks, for the purposes of minimising the impact on the rest of the country or zone. The Group also agreed that the surveillance programme should take into account the measures that had been taken, the density of poultry production, types of poultry and local management practices, etc.

#### Article 10.4.5. Recommendations for importation from a country, zone or compartment free from high pathogenicity avian influenza

The Group agreed to include that the words “that the poultry originated from a country, zone or compartment free from HPAI” without the need to specify “since they were hatched or for at least the past 21 days”.

#### Article 10.4.6. Recommendations for importation of live birds other than poultry

The Group agreed that the birds should be kept in isolation for at least 28 days instead of 21 days and should be subjected to a diagnostic test for influenza A viruses within 14 days prior to shipment, with negative result for H5 or H7 subtype. The Group noted that the change to 28 days from 21 days was introduced using the double incubation period.

#### Articles 10.4.7., 10.4.10., 10.4.13. and 10.4.16. Recommendations for importation from a country, zone or compartment free from avian influenza

The Group agreed that these articles should not be presented and deleted the articles.

#### Article 10.4.8. Recommendations for importation from a country, zone or compartment free from high pathogenicity avian influenza

The Group suggested that the poultry be derived from parent flocks free from infection with any H5 or H7 influenza A viruses or that day-old live poultry were hatched from eggs that have had their surfaces sanitized in accordance with point 4 d) of Article 6.5.5. The Group noted the 21 days should be taken out and included that the parent flocks had no clinical sign of infection at the time of egg collection.

#### Article 10.4.9. Recommendations for importation of day-old live birds other than poultry

The Group suggested that the parent flock birds were subjected to a diagnostic test for influenza A viruses at the time of the collection of the eggs, with negative results for H5 or H7 subtype.

Article 10.4.11. Recommendations for importation from a country, zone or compartment free from high pathogenicity avian influenza

The Group suggested that the eggs were derived from parent flocks free from infection with any H5 or H7 influenza A viruses at the time of the collection of the eggs, or the eggs had their surfaces sanitized in accordance with point 4 d) of Article 6.5.5.

Article 10.4.12. Recommendations for importation of hatching eggs from birds other than poultry

The Group agreed that the parent flock birds were subjected to a diagnostic test for influenza A viruses 14 days prior to and at the time of the collection of the eggs and with negative result for H5 or H7, and the eggs had their surfaces sanitized in accordance with point 4 d) of Article 6.5.5.

Article 10.4.14. Recommendations for importation from a country, zone or compartment free from high pathogenicity avian influenza

The Group agreed that the eggs should be produced and packed in a country, zone or compartment free from high pathogenicity avian influenza and transported in new or appropriately sanitized packaging materials.

Article 10.4.15. Recommendations for importation of egg products of poultry

The Group agreed that the commodity should be derived from eggs which met the requirements of Article 10.4.14. or processed to ensure the inactivation of avian influenza virus in accordance with Article 10.4.25.

Article 10.4.17. Recommendations for importation of poultry semen from a country, zone or compartment free from high pathogenicity avian influenza

The Group agreed that the donor poultry should show no clinical sign of avian influenza in poultry on the day of semen collection and have been kept in a country, zone or compartment free from high pathogenicity avian influenza.

Article 10.4.19. Recommendations for importation of fresh poultry meat from a country, zone or compartment free from high pathogenicity avian influenza

The Group agreed that the entire consignment of fresh meat should come from poultry which originated from a country, zone or compartment free from high pathogenicity avian influenza, which had been slaughtered in an approved abattoir in a country, zone or compartment free from high pathogenicity avian influenza in poultry and had been subjected to ante- and post-mortem inspections in accordance with Chapter 6.3. with favourable results.

Article 10.4.20. Recommendations for importation of meat products

The Group agreed that the commodity should have been processed to ensure the inactivation of avian influenza virus in accordance with Article 10.4.26.

Article 10.4.20bis. Recommendations for importation of poultry products not listed in Article 10.4.1bis and intended for use in animal feed, or for agricultural or industrial use

The Group agreed that Articles 10.4.21. and 10.4.24. could be combined and become Article 10.4.20bis. for the importation of poultry products not listed in Article 10.4.1bis. The Group noted that rendered meat, bone meal and blood meal were safe because the industry associations standard processing practice was well above the requirements to inactivate the viruses.

#### Article 10.4.22. Recommendations for importation of feathers and down of poultry

The Group agreed that these commodities should have originated from poultry as described in Article 10.4.19. and have been processed in a country, zone or compartment free from high pathogenicity avian influenza, or these commodities should have been processed to ensure the inactivation of avian influenza virus.

#### Article 10.4.23. Recommendations for importation of feathers and down of birds other than poultry

The Group agreed that these commodities should have been processed to ensure the inactivation of any virus which would be considered avian influenza in poultry.

#### Article 10.4.26bis. Procedures for the inactivation of high pathogenicity avian influenza virus in scientific specimens and skins and trophies

The Group agreed that these commodities should have been processed to ensure the inactivation of high pathogenicity avian influenza virus in scientific specimens and skins and trophies.

#### Diagrams use and interpretation of diagnostic tests in surveillance

The Group questioned the necessity of including in the *Terrestrial Code* diagrams on the use and interpretation of diagnostic tests in surveillance (Article 10.4.33.) and proposed that they be moved to the *Terrestrial Manual*.

A draft paper for publication in the OIE *Bulletin* that covers updates on the epidemiology of current AI outbreaks, the dynamics of AI introduction by wild birds, targeted surveillance, and risk mitigating measures was submitted to the Group for comment.

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**OIE AD HOC GROUP ON AVIAN INFLUENZA**

**Paris, 25–27 June 2018**

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**Agenda**

- 1) Opening of the meeting
- 2) Adoption of the agenda and meeting arrangements
- 3) Summary of the outcomes of the first meeting of the *ad hoc* Group held in December 2017
- 4) Address Member Countries' comments received after the February 2018 Specialist Commission meetings.
  - a) Definition of 'AI'
  - b) Definition of 'poultry'
  - c) Other issues
- 5) Developments since the last meeting of the *ad hoc* Group (in December 2017)
  - a) The 21-day incubation period and the three-month waiting period to recover disease free status
  - b) Safe commodities
  - c) Commodity-trade requirements
  - d) Vaccination
  - e) Surveillance
- 6) Other matters
- 7) Date of next meeting.



## REPORT OF THE OIE AD HOC GROUP ON AVIAN INFLUENZA VIRUSES

Paris, 25–27 June 2018

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