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REPORT OF THE ELECTRONIC CONSULTATION OF THE AD HOC GROUP ON FOOT AND MOUTH DISEASE (FMD)

Paris, June - August 2020

1. Background and opening

Dr Neo Mapitse, Head of the Status Department, welcomed the experts of the *ad hoc* Group on foot and mouth disease (the Group) and thanked them on behalf of the OIE Director General for having found the time to undertake the assignment within the time limitations and challenges due to the COVID-19 pandemic.

Since the adoption in May 2015, Chapter 8.8 on infection with foot and mouth disease virus of the *Terrestrial Animal Health Code* (*Terrestrial Code*) had been subject to an ongoing review by OIE Members, different *ad hoc* Groups and Specialist Commissions. When considering the recommendations for importation of animals and animal products, during the meeting of the Terrestrial Animal Health Code Commission (TAHSC) in February 2017, it was noted that there are no recommendations for the importation of fresh meat of domestic small ruminants from infected countries or zones as they are not covered by Article 8.8.22. Moreover, there are no provisions for the importation of fresh meat of susceptible captive wild animals and wild animals. In order to address these gaps, the Specialist Commissions requested the OIE Secretariat to consult the experts of the *ad hoc* Group on FMD to assess and draft, where appropriate, recommendations for the importation of meat of susceptible captive wild animals and wild animals or meat of domestic small ruminants from countries or zones infected with FMD virus (FMDv).

2. Process of the electronic consultation, adoption of the agenda and appointment of chairperson and rapporteur

Based on the literature review performed by the OIE Secretariat, some critical areas were identified for which experts' advice was requested electronically. Dr Wilna Vosloo acted as the chairperson and Dr David Paton as the rapporteur for the Group.

An electronic consultation was conducted between June and August 2020. All experts signed the forms for undertaking of confidentiality and declaration of conflicts of interest. The OIE reviewed the declared interests and agreed that none represented a potential conflict in the revision of the Chapter. The terms of reference and list of participants are presented in <u>Appendices I</u> and <u>II</u>, respectively.

3. Review of relevant draft provisions and report of the ad hoc Group on FMD in June 2016

The Group noted that domestic pigs were not included in the list of species category to be addressed in this consultation. The Group noted the report of the June 2016 *ad hoc* Group where provisions (draft article 8.8.22bis) for imports of fresh pig meat from infected countries or zones were drafted. The Group reviewed the report and the draft provisions for the imports of fresh meat of pigs from infected countries or zones from the meeting of the *ad hoc* Group in June 2016. The Group pointed out that:

a) pigs do not act as carriers, and subclinical infection in pigs is not epidemiologically relevant;

- b) fresh meat from viremic pigs or pigs in the incubation period may pose a risk for FMDv transmission;
- c) the risk mitigation measures of maturation, deboning and removal of the lymph nodes in beef was not applicable to pork;
- d) the meat from pigs that would comply with Article 8.8.12. (import of live pigs from an infected country or zone) would be safe for trade provided that specific transport and slaughter conditions have been respected; and
- e) the provision, in draft article 8.8.22bis, for post-slaughter follow-up at the establishment of origin to reconfirm continuing FMD freedom needs to be clearer about when and what type of inspection should be conducted and about the requirements for remaining pigs.

The Group listed the specific sanitary conditions for slaughter in approved slaughterhouses. The carcasses from those pigs would be considered safe for trade when FMD had not occurred within a ten-kilometre radius of the establishment and after a sufficient time period had elapsed to allow the Veterinary Authority to confirm that FMDv was not incubating when the animals were being kept in the establishment.

4. Considerations of provisions for importation of different FMD susceptible commodities from FMD infected countries or zones where an official control programme exists

Considering the draft recommendations proposed for the importation of fresh meat of domestic pigs from infected countries or zones in the previous *ad hoc* Group meeting and the available scientific literature and knowledge, the feasibility of developing recommendations for domestic ruminants and pigs, and captive wild ruminants and pigs was further discussed. The Group considered that two approaches were possible, based on either Article 8.8.22 for deboned meat or draft article 8.8.22bis for bone-in meat. Whereas Article 8.8.22 requires deboning of carcasses and lymph node removal, in draft article 8.8.22bis, these mitigations are replaced by measures that include virological testing. The Group developed wording to adapt Article 8.8.22, which currently covers cattle and water buffaloes, to cover domestic sheep, goats and pigs (excluding feet, heads, viscera and skin). Draft article 8.8.22bis was used as a basis for developing an article covering meat from domestic and captive wild species and as a second draft article on wild ruminants and pigs. The Group considered the application of risk-mitigation measures before, during or after slaughter in the development of their recommendations. The Group considered it more difficult to provide satisfactory risk-mitigation measures prior to or during slaughter for ensuring the safety of meat from free-ranging wild animals. A further challenge highlighted by the Group was to avoid putting forward mitigations that are so onerous and/or costly as to render any newly recommended provisions unfeasible.

For the provisions for fresh meat of domestic ruminants and pigs, and captive wild ruminants and pigs, the Group considered the provisions of Article 8.8.12. on importation of domestic ruminants and pigs from FMD infected countries and zones.

Serological testing for the detection of antibodies against non-structural proteins (NSP) of FMDv would be a measure to provide confidence in substantiating the absence of FMDv infection. An alternative option to the NSP serological tests or in case these tests have not been validated for the species in question, would be the use of approved vaccines – matching with the circulating serotypes and strains. However, the performance of both NSP tests and FMD vaccines is not well documented for many wildlife species. The Group also discussed the testing of carcasses for the detection of FMDv genome using RT-PCR carried out on a pooled sample of blood and of one carcass lymph node from each animal. The rationale is that virus is present in the blood in the early stages of infection and persists longest in lymphoid tissues. The Group did not determine the maximum limit for pooling of samples but considered that combining two samples (of blood and lymph node) per animal would improve the economic feasibility of testing without significantly reducing the sensitivity of detection compared to testing the samples individually. Application of RT-PCR tests or equivalent tests (e.g. RT-LAMP) for FMDv detection in abattoir samples has not been formally validated as a procedure. However, the high sensitivity and sample matrix applicability of the test when properly performed means that a negative result should add considerably to confidence that the virus tested for is not present.

The Group took into consideration the risk of the feet, heads and viscera/offal in the transmission of FMDv through carcasses and the options for their removal. In the case of domestic ruminants and pigs, and captive wild ruminants and pigs, noting that FMDv may be present in the pharynx of ruminants much longer than in the lymph nodes and blood, the Group recommended removing the heads only of ruminants, and not pigs as pigs are not considered to be carriers of FMDv. The risk of FMDv being present in the viscera, skin and feet would be negligible if the blood and lymph nodes have been properly tested, since these are not tissues where FMDv is found after the resolution of acute infections. The Group also underlined the importance of continued absence of FMD on the establishment of origin and in the surrounding ten-kilometre area of the establishment from the time the animals or carcasses have left the establishment of origin until the release of the carcasses from the slaughterhouse.

Whilst the Group proposed provisions encompassing a broader range of domestic, captive wild and wild species, the Group underlined that these draft provisions would be restricted to Members having an OIE endorsed official control programme as this would provide additional assurance of the Member's capacity and advancement in the control of FMD, notably the timely reporting of suspicions, the match and efficacy of vaccines, the performance of official diagnostic laboratories. This approach was also in line with the Global FMD Control Strategy to encourage Members to progress in achieving OIE endorsement of their official control programmes for FMD and its objectives. The Group also emphasised the necessity for the species and husbandry systems concerned to be covered by and subject to the measures set out in the OIE endorsed official control programme operated in the exporting country.

With regard to wild ruminants and wild boar, based on the lack of sufficient evidence-based information, the Group also found it challenging to provide adequate risk-mitigation measures, before or during slaughter, to ensure the safety of the meat. Whilst the Group discussed the difficulty in drafting precise measures that would apply to all possible situations due to the broad diversity of possible circumstances associated with wild and feral animals, the Group made an attempt in describing general provisions that could assure safe trade. In these provisions, the exclusion of heads, viscera and feet was retained as an extra safety measure because there is so much reliance on the quality of the virological testing. This was considered unnecessary in the case of domestic and captive wild pigs, as both virological and serological testing are required to ensure the detection of FMDv if present.

Although the Group proposed requirements, based on Article 15.2.15, Chapter 15.2, Infection with classical swine fever virus, regarding the use of vaccines or the testing of carcasses and animals for the detection of antibodies against NSP of FMDv in wild ruminants and wild boar, it is important to note that the performance of both FMD vaccines and NSP tests in wildlife species has not been well validated.

Regarding meat from wild ruminants and wild boar, the Group considered that the animals would be less likely to become infected in an environment where there was systematic vaccination of bovine animals and surveillance in all susceptible species, including non-vaccinated domestic and wild/feral species. However, the primary safeguard would be the testing and maturation with controlled pH reduction in the meat.

While drafting the provisions for bone-in fresh meat of domestic ruminants and pigs, and captive wild ruminants and pigs, the Group thought it was reasonable to also offer provisions for deboned meat as they are not currently addressed in Chapter 8.8. of the *Terrestrial Code*. Considering that sheep, goats and pigs are not routinely vaccinated species, the Group mentioned that systematic vaccination in cattle and water buffaloes would be necessary to reduce the risk of infection with FMDv in other domestic species. The Group also noted that no susceptible animals should have been introduced into the establishment during the 30-day isolation.

5. Adoption of the report

The Group reviewed the draft report provided by the rapporteur and agreed to circulate the draft report electronically for comments before the final adoption. Upon circulation, the Group agreed that the report captured the discussions.

.../Appendices

Appendix I

ELECTRONIC CONSULTATION OF THE AD HOC GROUP ON FOOT AND MOUTH DIEASE (FMD)

TERMS OF REFERENCE

Purpose

The purpose of this consultation of the *ad hoc* Group is to consider the feasibility of having recommendations for the importation of meat of susceptible captive wild animals and wild animals or meat of domestic small ruminants from FMD infected countries or zones, including the development of the recommendations for Chapter 8.8. of the *Terrestrial Code*.

This would provide, if feasible, the Scientific Commission for Animal Diseases (SCAD) with draft recommendations for the importation of the aforementioned commodities.

The ad hoc Group is convened under the authority of and reports to the OIE Director General.

Background

Since the adoption in May 2015, Chapter 8.8 on infection with foot and mouth disease virus of the *Terrestrial Animal Health Code* (*Terrestrial Code*) had been subject to an ongoing review by OIE Members, different *ad hoc* Groups and Specialist Commissions. When considering the recommendations for importation of animals and animal products, during the meeting of the Terrestrial Animal Health Code Commission (TAHSC) in February 2017, it was noted that there are no recommendations for the importation of fresh meat of domestic small ruminants from infected countries or zones as they are not covered by Article 8.8.22. Moreover, there are no provisions for the importation of fresh meat of susceptible captive wild animals and wild animals. In order to address these gaps, the Specialist Commissions requested the OIE Secretariat to consult the experts of the *ad hoc* Group on FMD to assess and draft, where appropriate, recommendations for the importation of meat of susceptible captive wild animals and wild animals or meat of domestic small ruminants from countries or zones infected with FMDv.

Specific issues to address

During its February 2020 meeting, the SCAD requested that OIE Headquarters (HQ) conduct a literature research to provide scientific support for further decisions by the experts of the FMD *ad hoc* Group

Therefore, in order to modify or develop the relevant Articles in Chapter 8.8 of the *Terrestrial Code*, the OIE HQ will convene the experts of the FMD *ad hoc* Group on FMD status of Members to assess and propose, where appropriate, draft recommendations for the importation of meat of susceptible captive wild animals and wild animals or meat of domestic small ruminants from infected countries or zones.

Actions to deliver

The Members of this Group will provide their expertise to:

- Assess the current *Terrestrial Code* recommendations related to the importation of meat of susceptible animals from FMD infected countries or zones;
- Assess the feasibility of developing draft recommendations for the importation of meat of susceptible captive
 wild animals and wild animals or meat of domestic small ruminants from infected countries or zones based
 on the scientific and technical information provided or to provide additional evidence if needed;
- If feasible, to propose draft articles for Chapter 8.8. of the *Terrestrial Code* containing these recommendations for consideration by the Specialists Commissions and a scientific rationale to support them.

Consideration

- Consider the summary of the literature survey reviewed by OIE HQ;
- Consider scientific evidence available in public domain (scientific references must be provided and included in the draft text)

Expectations

Prerequisites to participation

- Sign off the OIE Undertaking on Confidentiality of information (if not done already)
- Complete the declaration of Interest Form

Experts of the *Ad hoc* Group should:

- Agree on the appointment of the chair and rapporteur of the meeting
- Contribute to discussions electronically
- Contribute to drafting and finalising the report
- Expect that they may be consulted again to ensure continuity of the work

Deliverables

The expected outcome of the electronic consultation of the FMD *ad hoc* Group is a report on the assessment of the recommendations for importation of meat from FMD susceptible animals from infected countries/zones, including draft articles for Chapter 8.8 of the *Terrestrial Code* when appropriate.

Reporting / timeline

The experts will conclude their consultation and submit the draft report by 20 August 2020.

The report of the consultation will be submitted to the Director General of the OIE, and approved report will be considered by the relevant Specialist Commissions in accordance with the OIE Basic Texts.

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Appendix II

ELECTRONIC CONSULTATION OF THE AD HOC GROUP ON FMD JUNE – AUGUST 2020

List of participants

MEMBERS

ARGENTINA

Dr Sergio Duffy Consultant Arenales 2303 C1124AAK Ciudad Autónoma de Buenos Aires

Dr Ben Du PlessisDeputy Director Animal Health,
Ehlanzeni South District
SOUTH AFRICA

Dr Alf-Eckbert FüsselActing Head of Unit, DG SANTE/G2
Rue Froissart 101-3/64 - B-1049 Brussels
BELGIUM

Dr Manuel J Sanchez Vazquez FMD Center/PAHO-WHO Centro Panamericano de Fiebre Aftosa Caixa Postal 589 - 20001-970 Rio de Janeiro BRAZIL Dr David Paton The Pirbright Institute Ash Road, Woking Surrey GU20 0NF UNITED KINGDOM

Dr Wilna Vosloo Group Leader CSIRO Livestock Industries Australian Centre for Disease Preparedness Private Bag 24 Geelong, VIC 3220 AUSTRALIA

REPRESENTATIVE OF THE SCIENTIFIC COMMISSION

Dr Kris de Clercq Sciensano Department of Virology Section Epizootic Diseases Groeselenberg 99 B-1180 Ukkel BELGIUM

OIE HEADQUARTERS

Dr Neo Mapitse
Head of Status Department
12 rue de Prony
75017 Paris
FRANCE
disease.status@oie.int

Dr Min Kyung ParkDeputy Head of Status Department disease.status@oie.int

Dr Hernán O. DazaDisease Status Officer
Status Department
disease.status@oie.int

Dr Mauro MeskeDisease Status Officer
Status Department
disease.status@oie.int

Dr Aurelio Cabezas Murillo Disease Status Officer Status Department disease.status@oie.int