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MEETING OF THE OIE AD HOC GROUP ON THE EVALUATION OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS¹ Paris, 5 – 7 November 2019

A meeting of the OIE *ad hoc* Group on the Evaluation of Foot and Mouth Disease (FMD) Status of Members (hereafter the Group) was held at the OIE Headquarters from 05 to 07 November 2019.

1. Opening

Dr Matthew Stone, Deputy Director General for International Standards and Science of the OIE, welcomed the Group. He thanked the experts for their contribution and support to the OIE activities and extended his appreciation to their institutes and national governments for allowing their participation in this meeting. He acknowledged the amount of work done before, during, and after the *ad hoc* Group meeting as well as the time and efforts required in reviewing the applications.

Dr Min-Kyung Park, Deputy Head of the Status Department, thanked the experts for having signed the forms for undertaking of confidentiality and declaration on potential conflicts of interest related to the mandate of the Group. She confirmed that the potential conflict of interest in the evaluation of one of the applications declared by an expert would be managed accordingly.

Dr Park introduced Drs Mauro Meske and Aurelio Cabezas, who joined the Status Department to work on the activities related to official disease status recognition and high health high performance horses, and on a project related to suspensions and recoveries of FMD status, respectively.

2. Adoption of the agenda and appointment of chairperson and rapporteur

The Group was chaired by Dr David Paton and Dr Alf-Eckbert Füssel acted as rapporteur, with the support of the OIE Secretariat. The Group endorsed the proposed agenda.

The terms of reference, agenda and list of participants are presented as Appendices I, II and III, respectively.

3. Evaluation of a request from a Member for official recognition of a FMD free status where vaccination is not practised

The Group assessed a request from a Member for the recognition of a FMD free country status where vaccination is not practised. The Group concluded that the application did not meet the requirements of the *Terrestrial Code*. The dossier was referred back to the applicant Member.

4. Evaluation of a request from a Member for official recognition of a FMD free zone where vaccination is not practised

Chinese Taipei

Chinese Taipei was recognised as having a zone free from FMD where vaccination is practised in May 2017;

¹ 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 February 2020 report of the Scientific Commission for Animal Diseases because this report provides its considerations and comments. It is available at: <u>http://www.oie.int/en/international-standard-setting/specialists-commissions-groups/scientific-commission-reports/meetings-reports/</u>

this zone covered Taiwan, Penghu and Matsu areas, which includes the entire Province of Taiwan and Matsu County. In May 2018, Kinmen County in Chinese Taipei was recognised as a separate zone free from FMD where vaccination is practised, which includes 14 islands, of which only Kinmen Island, Lieyu Island and Wuqiu Township have FMD susceptible animals. As of May 2018, these two zones are covering the entire territory of Chinese Taipei.

In September 2019, Chinese Taipei submitted an application for the recognition of the zone officially recognised in May 2017 as free from FMD where vaccination is not practised.

The Group requested additional information and received clarification from Chinese Taipei. The Group acknowledged the transparency and clarity of the dossier.

i) Animal disease reporting

The Group considered that Chinese Taipei had a record of regular and prompt animal disease reporting.

ii) Veterinary Services

The Group acknowledged that the Veterinary Authority had current knowledge of, and authority over, FMD susceptible animals in the proposed zone.

iii) Situation of FMD in the past 12 months

The Group noted that the last outbreak of FMD in the proposed zone was in a pig farm which was resolved in July 2013.

iv) Absence of vaccination and entry of vaccinated animals in the past 12 months

The Group noted that the last vaccination in the proposed zone was carried out in July 2018. In accordance with Article 8.8.3. of the *Terrestrial Animal Health Code* (*Terrestrial Code*), Chinese Taipei informed the OIE in advance about the intended cessation of vaccination in the proposed zone.

The Group acknowledged that vaccination was prohibited by law in the proposed zone according to articles 13-1 and 14 of the "Vaccine Type Required and Management Measures for Eradication of Classical Swine Fever and FMD", which established the ban on vaccinating cloven-hoofed animals against FMD in the proposed free zone by owners, keepers or practising veterinarians starting from 1 July 2018. In addition, the Group was informed that a specific law was in place prohibiting the transport of cloven-hoofed animals and animal products from Kinmen to the main island and other islands.

Chinese Taipei reported the detection of illegal vaccination in two pig farms during routine serological monitoring. Fines were imposed on the farmers due to the violation of the established law. The Group recommended that based on this experience, an improved system should be in place to ensure retrieval and destruction of all excess vaccines. This would be particularly important should Chinese Taipei wish to expand the areas free from FMD without vaccination in the future.

v) Surveillance in accordance with Articles 8.8.40 to 8.8.42.

Chinese Taipei described its passive surveillance based on reporting of suspicions supported by an awareness programme and compensation policy. Regarding active surveillance, Chinese Taipei described its strategy based on general surveillance, targeted surveillance and surveillance of pig auction markets.

The Group noted that the reference population for general surveillance in the proposed zone was selected based on a two-stage survey design with an adequate between-herd design prevalence of 1%. While the within-herd design prevalence chosen (20%) appeared rather high, in principle, the Group agreed that it was sufficient in a scenario where vaccination had ceased leading to a drop in the herd immunity level related to vaccination.

Regarding targeted surveillance, Chinese Taipei provided a detailed description of the survey design and of the criteria for the inclusion of high-risk farms; 800 high-risk pig farms and over 160 high-risk ruminant farms were sampled each year for virus neutralisation and NSP antibody tests. The Group noted that pig auction market surveillance, conducted from July 2017 to July 2019, consisted of sampling about 40,000 samples per year with appropriate follow-up and investigations of suspicions, which all were concluded negative to FMD.

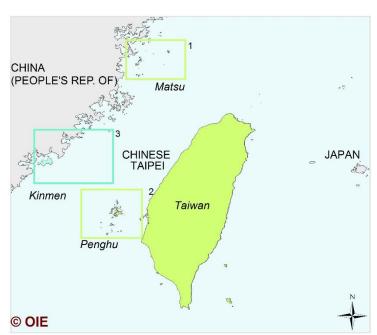
Overall, the Group concluded that the combined strategy for surveillance in Chinese Taipei was sufficient to demonstrate the absence of the infection with FMD virus in unvaccinated animals and FMD virus transmission in previously vaccinated animals.

vi) Regulatory measures for the prevention and early detection of FMD

The Group noted the risk of swill feeding, particularly with regard to the open pig housing system with low biosecurity. Chinese Taipei described how these farms were under the control of the township veterinarians and the Local Animal Disease Inspection Authority (LADIA). Furthermore, thanks to the national preparedness for African swine fever, the LADIAs have completed joint inspection of the swill-fed pig farms nationwide. Swill feeding in pigs could only be carried out in those farms approved by the local environmental protection bureau by using heat treatment of the swill. The Group also acknowledged that the Veterinary Service provides subsidies and technical support to encourage these farms to leave the pig farming business or stop swill feeding, which led to the decrease in the number of farms performing swill feeding. Nevertheless, the Group recommended that if swill feeding was to continue, then it is much safer if the treatment of the swill is always carried out away from pig keeping premises.

Considering the information provided in the dossier as well as the fact that the proposed zone is already officially recognised free from FMD (where vaccination is practised), the Group concluded sufficient regulatory measures were described in the dossier for the early detection, prevention and control of FMD.

vii) Description of the boundaries of the proposed free zone, if applicable



The proposed free zone covers Taiwan, Penghu and Matsu areas, which includes the entire Province of Taiwan and Matsu County.

Fig. 1. Proposed FMD free zone where vaccination is not practised in green [Taiwan, Penghu and Matsu] for potential recognition in May 2020.

FMD free zone where vaccination is practised consisting of Kinmen County in blue

viii) Description of the boundaries and measures of a protection zone, if applicable

Not applicable.

ix) Description of the system for preventing the entry of the virus (into the proposed FMD free zone)

The Group considered the described measures adequate to prevent the entry of FMD virus into the proposed zone, including awareness campaigns, regular simulation exercises and legislation.

x) Compliance with the questionnaire in Article 1.11.3.

The Group appreciated the well-structured and good quality dossier provided by Chinses Taipei. The format of Chinse Taipei's dossier was compliant with the questionnaire in Article 1.11.3.

Conclusion

Considering the information submitted in the dossier and to the questions raised, the Group agreed that the application was compliant with the requirements of Chapter 8.8. and with the questionnaire in Article 1.11.3. of the Terrestrial Code. The Group therefore recommended that the proposed zone of Chinese Taipei be recognised as a FMD free zone where vaccination is not practised.

5. Evaluation of requests from Members for the official recognition of FMD free zones where vaccination is practised

a) Brazil

In September 2019, the Delegate of Brazil submitted a note to the OIE to apply for the merging of two officially recognised zones free from FMD where vaccination is practised, namely the extended zone designated by the Delegate of Brazil in a document addressed to the Director General in September 2017 (composed of the States of Amapá, Roraima, Amazonas, Pará, Rondônia, Acre, Espírito Santo, Minas Gerais, Rio de Janeiro, Sergipe, Distrito Federal, Goiás, Mato Grosso, Paraná, São Paulo, Bahia, Tocantins, Alagoas, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, and parts of Mato Grosso do Sul) and the zone (former high surveillance zone in State of Mato Grosso do Sul) as designated by the Delegate of Brazil in documents addressed to the Director General in August 2010.

Brazil clarified that based on the current epidemiological situation with regard to FMD in the South American continent and more specifically at the borders that constituted the former high surveillance zone in the State of Mato Grosso do Sul, the maintenance of a separate FMD free zone was no longer necessary.

Conclusion

Considering the information provided by Brazil including the rationale for the merging of the two zones already having an official FMD free status by the OIE, the Group recommended the approval of the merging of the two zones of Brazil for official recognition as one zone free from FMD where vaccination is practised.

The Group noted that any introduction of FMD into the newly delineated free zone would now lead to the suspension of the official FMD free status of the entire merged free zone.

b) Colombia

The Group assessed a request from Colombia on the separation of a previously recognised FMD free zone where vaccination is practised into different zones. The detailed assessment is in <u>Appendix IV</u> of this report and reference is made on Section 5.3. of SCAD report on *Expert missions to Members requested by the Commission*.

6. Evaluation of a request from a Member for the endorsement of its national official control programme for FMD

Kyrgyzstan

In September 2019, Kyrgyzstan submitted an application to the OIE for the endorsement of its national official control programme for FMD. The Group requested additional information and received clarification from Kyrgyzstan.

i) Animal disease reporting

The Group considered that Kyrgyzstan had a record of regular and prompt animal disease reporting for FMD.

ii) Capacity of the Veterinary Services to control FMD

The Group noted from the dossier that Kyrgyzstan had received a PVS evaluation (2007), a Gap Analysis (2008), two missions on Veterinary Education and Veterinary Legislation in 2015, a PVS follow-up evaluation mission in 2016 and a PVS laboratory mission in 2017. Most recently, a PVS Gap Analysis mission was deployed in 2018. The Group noted a general improvement in the critical competences essential for FMD control while comparing the most recent report of 2018 with the previous mission in 2016. However, there were still areas for further improvement, such as zoning, risk analysis, disease prevention, control and eradication.

The Group commended Kyrgyzstan's efforts in utilising the different tools offered by the OIE to improve its Veterinary Services and encouraged the country to continue working on the implementation of the recommendations made from these missions.

iii) Applicability of the official control programme for FMD to the entire territory

The dossier provided information that the official control programme was considering the whole territory of Kyrgyzstan while following a zonal approach for FMD control. The main strategy included compulsory mass vaccination of large ruminants.

iv) The detailed plan of the programme to control and eventually eradicate FMD in the country or zone

The Group noted three predefined zones (safe zone, buffer zone and intensive control zone) as part of Kyrgyzstan's progressive approach to eventually achieve a FMD free country status. However, the Group could not find a detailed description of control measures on how Kyrgyzstan plans to separate and control the subpopulations in the three predefined zones. The dossier did not provide information on how this particular zoning demarcation took into account essential existing movement patterns (i.e. movements for grazing, to abattoirs, markets, etc.). Whilst measures to prevent introduction of infection, particularly movement control of animals and their products were provided, there was lack of sufficient evidence of the effectiveness of the measures.

Kyrgyzstan reported that restrictive measures were applied to the movements of animals and animal products between the buffer zone and the safe zone. Despite requests for additional information, Kyrgyzstan did not provide the figures for legal movements of animals between the buffer and safe zone, thus the Group could not determine whether a system for tracking and recording these movements was in place. In contrast, Kyrgyzstan presented relatively high numbers of attempted illegal movements of FMD susceptible animals from the buffer zone to the safe zone. The Group underlined the importance of having clear procedures and measures for the control of movement of animals and animal products in accordance with the zoning provisions of the *Terrestrial Code* as well as documented evidence of their effectiveness should Kyrgyzstan wish to apply for official recognition of a zone free from FMD.

The Group noted Kyrgyzstan's plan to achieve official recognition of the safe zone free from FMD with vaccination in 2021 and free without vaccination in 2024.

v) Epidemiology of FMD in the country

Kyrgyzstan provided the location of the outbreaks of the last 10 years, as well as the potential/possible sources and risk factors for FMD in the country. It described a decrease in the number of FMD outbreaks in 2008-2009 after the implementation of large-scale vaccination in 2008; however, due to mismatch between the vaccine and circulating field strains, an increased number of outbreaks were reported in 2010-2011. The last FMD outbreak in the country was reported in 2014 in the Talas region, situated in the north-west of Kyrgyzstan.

The Group considered that risks were not clearly mapped out and that there was insufficient information about the source and routes of spread for the previous FMD outbreaks in the country. In addition, where NSP positive animals were detected, no clear conclusions were drawn as to whether outbreaks have occurred, even though ring vaccination was applied. This constitutes a serious information gap in attaining a clear understanding the epidemiology of FMD in the country.

vi) FMD surveillance

The Group acknowledged the information provided by Kyrgyzstan on FMD surveillance but found it difficult to follow as it was not well structured and not comprehensive; in particular, the procedures of follow-ups of suspicions. The definition of a case of FMD provided by Kyrgyzstan was mainly based on presence of clinical signs or of virus and was not in line with the provisions under Article 8.8.1. of the *Terrestrial Code*. The Group would recommend Kyrgyzstan to consider aligning its definitions with the OIE definitions of the *Terrestrial Code*.

Although Kyrgyzstan provided some information on the sampling design, essential details to understand the epidemiological study design and the results were lacking such as the definition of the sampling areas, total number of epidemiological units to be sampled, information on the within-herd prevalence assumed to estimate the number of animals to be sampled according to the size of the epidemiological unit. The Group would have also appreciated to receive a breakdown of the results by age group, geographical distribution of the sampled and positive animals.

Kyrgyzstan was requested to provide detailed information on the interpretation of the results of the NSP sero-surveys conducted from 2017 to 2019 to evaluate FMD virus transmission. After analysing the additional information, the Group still had difficulty understanding the significance of the results of the NSP sero-surveys. The Group expressed concern on the lack of serological follow-up and field investigations conducted to rule out FMD in the suspected cases, clinically and serologically (i.e. NSP positive samples). The Group emphasised that, in addition to clinical inspection, the follow-up should include supplementary testing of the animals that tested positive and the in-contact animals, the use of confirmatory tests and paired serology as well as epidemiological investigation in accordance with Article 8.8.42. of the *Terrestrial Code*.

The Group also emphasised the importance of FMD surveillance in small ruminants; the risk of undisclosed infection in small ruminants should not be overlooked given the large numbers of goats and sheep present in the country and the fact that subclinical FMD infection in these species is common.

vii) Diagnostic capability and procedure

The dossier explained that laboratory diagnosis of FMD was conducted in two national laboratories: Republican Center for Veterinary Diagnostics and Expertise laboratory in Bishkek, where samples from all northern regions (Naryn, Talas, Issyk-Kul, Chui regions and Toktogul district) were tested and Osh Zonal Center for Veterinary Diagnostics, where samples from all southern regions (Osh, Jalalabad, Batken regions) were tested. The relevant technical units of the two diagnostic laboratories for FMD were accredited under international standard ISO / IEC 17025. The Group acknowledged the cooperation with other laboratories, such as the OIE Reference Laboratory for FMD in Russia as well as other regional laboratories, which were capable of performing additional diagnostics for FMD. The infrastructure, capacities, quality assurance of the laboratory and its involvement in the proficiency testing were also acknowledged.

The Group encouraged Kyrgyzstan to continue its participation in interlaboratory proficiency testing schemes (ring trials) for FMD tests.

viii) Vaccination

The dossier presented a progressive control approach where zoning and vaccination were applied. Upon the Group's request, Kyrgyzstan provided information on vaccine purity and vaccination coverage presented by species and by region, as well as on population immunity surveys.

The Group acknowledged the large scale of vaccines purchased which was reaching closer to the quantities needed for the vaccination strategy. From the information supplied, vaccination coverage appears to be calculated as the ratio between the amount of vaccine required and purchased. The Group suggested that better estimates could be provided by using the data from the System of Identification and Traceability of Animals (SITA) to calculate the vaccination coverage by vaccination campaign, regions, herd size and ages of animals.

ix) Emergency preparedness and response plan

The Group noted that a description of the emergency plan with the chain of command was provided in the dossier; the control and eradication procedure in the event of a FMD outbreak was also explained. However, despite request from the Group, the criteria for emergency vaccination was not provided and the Group recommended that the contingency plan for FMD should include this information.

x) Compliance with the questionnaire in Article 1.11.5.

The Group agreed that the format of the dossier follows the structure of questionnaire in Article 1.11.5.

Conclusion

Considering the information submitted in the dossier and Kyrgyzstan's answers to the questions raised, the Group considered that the application was generally compliant with the requirements of Chapter 8.8. and the questionnaire in Article 1.11.5. of the Terrestrial Code. The Group therefore recommended that Kyrgyzstan's official control programme for FMD be proposed for endorsement.

8. Adoption of report

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

.../Appendices

MEETING OF THE OIE AD HOC GROUP ON THE EVALUATION OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS Paris, 05 – 07 November 2019

Terms of Reference

The OIE *ad hoc* group on foot and mouth disease (FMD) status of Members (the Group) is expected to evaluate the applications for official recognition of FMD free status and for endorsement of their official control programme of FMD received from Members in accordance with the Standard Operating Procedure for official recognition of disease status and for the endorsement of national official control programmes.

This implies that the experts, members of this Group are expected to:

- 1. Sign off the OIE Undertaking on Confidentiality of information, if not done before.
- 2. Complete the Declaration of Interests Form in advance of the meeting of the Group and forward it to the OIE at the earliest convenience and at least two weeks before the meeting.
- 3. Evaluate the applications from Members for official recognition of FMD free status and for endorsement of their official control programmes for FMD.
 - a) Before the meeting:
 - read and study in detail all dossiers provided by the OIE;
 - take into account any other information available in the public domain that is considered pertinent for the evaluation of dossiers;
 - summarise the dossiers according to the *Terrestrial Animal Health Code* requirements, using the form provided by the OIE;
 - draft the questions whenever the analysis of the dossier raises questions which need to be clarified or completed with additional details by the applicant Member;
 - send the completed form and the possible questions to the OIE, at least one week before the meeting.
 - b) During the meeting:
 - contribute to the discussion with their expertise;
 - withdraw from the discussions and decision making when possible conflict of interest;
 - provide a detailed report in order to recommend, to the Scientific Commission for Animal Diseases, i) the country(ies) or zone(s) to be recognised (or not) as FMD free ii) country(ies) to have (or not) the OIE endorsement of national official control programme for FMD, and to indicate any information gaps or specific areas that should be addressed in the future by the applicant Member.
 - c) After the meeting:
- 4. contribute electronically to the finalisation of the report if not achieved during the meeting.

MEETING OF THE OIE AD HOC GROUP ON THE EVALUATION OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS Paris, 05 – 07 November 2019

Agenda

- 1. Opening
- 2. Adoption of the agenda and appointment of chairperson and rapporteur
- 3. Evaluation of a request from a Member for official recognition of a FMD free status where vaccination is not practised
- 4. Evaluation of a request from a Member for the official recognition of a FMD free zone where vaccination is not practised
 - Chinese Taipei
- 5. Evaluation of requests from Members for the official recognition of FMD free zones where vaccination is practised
 - Brazil
 - Colombia
- 6. Evaluation of a request from a Member for the endorsement of official control programme for FMD
 - Kyrgyzstan
- 7. Adoption of report

MEETING OF THE OIE AD HOC GROUP ON THE EVALUATION OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS Paris, 05 – 07 November 2019

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c) Colombia

In September 2019, Colombia submitted an application for the separation of the previously recognised zone free from FMD where vaccination is practised (currently suspended) into four zones.

In accordance with the established procedures, the participating expert from Pan-American Centre for Foot-and-Mouth Disease (PANAFTOSA) expressed a possible conflict of interest and withdrew from the decision making on Colombia's dossier.

The Group requested additional information and received clarification from Colombia.

i) Animal disease reporting

The Group considered that generally Colombia had a record of regular and prompt animal disease reporting. However, some concerns were noted on the time that was taken to confirm cases by the laboratory in 2018, which were longer than expected. Furthermore, the Group questioned the non-reporting of the detection of an illegal introduction of animals in December 2018, where the animals were unloaded and developed FMD. The Group was of the opinion that this would fit the definition of an outbreak and should have been notified to the OIE.

ii) Veterinary Services

The Group was informed that Colombia had received a PVS follow-up evaluation mission in 2015. The PVS report provided additional support that the Veterinary Services were compliant with the requirements for a country having officially recognised FMD free zones.

Colombia reported that in order to address the illegal entry of animals and agricultural products into Colombia and considering the outbreaks of FMD in 2017 and 2018, as of October 2018, an Integrated Centre (CIIP) was created, consisting of the Colombian Institute for the Agricultural and Livestock sector (ICA), the National Institute for Medicine and Food Surveillance (INVIMA), the Fiscal and Customs Police (POLFA) and the National Tax and Customs Office (DIAN). The CIIP functions 24-hours a day and through the collaborative capacities of the agencies, the CIIP Integrated Centre aims to counteract smuggling of goods by using the information systems available to detect irregularities in the movement of livestock.

iii) Situation of FMD in the past 2 years

The last FMD outbreaks in each of the proposed FMD free zone were as follows: October 2018 in Zone I (Northern), June 2017 in Zone II (Eastern), 2000 in Zone III (Trade) and September 2018 in Zone IV (Rest of the country).

iv) Routine vaccination and vaccines

According to the dossier, cattle and buffalo are vaccinated against FMD twice a year. The Group noted a plan to implement an additional round of vaccination in the young stock (cattle and buffaloes under 24 months of age) in Zones I and II, during the months of July and August. However, the Group was unsure whether this plan also applied to the protection zone and High Surveillance Zone (HSZ) bordering a country of undetermined FMD status.

The Group noted that the characteristics of the vaccine and the standards for its production are laid down by ICA, following the provisions of the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (Terrestrial Manual)*. The vaccine authorised for use in Colombia is an inactivated, bivalent vaccine containing viral strains A24 Cruzeiro and O1 Campos. These vaccine strains were selected to provide suitable immunological correspondence with field strains prevalent in South America on the basis of analyses performed by PANAFTOSA. Most recently, an assessment had been made of the suitability of O1 Campos for use against the serotype O viruses obtained from Colombia in 2017; an expected protection value of 76% was obtained, which was above the 75%-threshold for acceptance.

The Group acknowledged that the Colombian Livestock Federation (*Federación Colombiana de Ganaderos*, FEDEGAN), organises the logistical activities in all territories where vaccination is implemented. The territory to be vaccinated, which corresponds to the four proposed zones along with the protection zone and HSZ, is divided up into locally organised vaccination projects managed by the dedicated authorised organisation (*Organización Ejecutora Ganadera Autorizada*, OEGA). The Unique Vaccination Registry (RUV) is the official document issued at the end of the vaccination process for each farm.

With regard to the effectiveness of the FMD vaccination programme, the Group was informed on the coverage of vaccinated farms and animals for each zone, obtaining levels over 90% for all the proposed zones. Colombia also provided results of herd immunity at herd level for serotypes O and A in three zones (central zone, northern zone, and rest of the country) which were different from the four proposed zones but based on the FMD epidemiological situation and covering the territories of the four proposed zones. The results showed a pattern of increasing immunity level by age category, and where low immunity was detected there was no indication of clustering.

v) Surveillance for FMD and FMDV transmission in accordance with Articles 8.8.40. to 8.8.42.

The Group was given details of the active and passive surveillance that were in place. For example, the number of suspect vesicular cases which were investigated in the last two years was provided in the dossier and additional information provided by Colombia. The Group acknowledged appropriate follow-up procedures were performed on suspected cases. However, the Group made a comment that one probang sample is not sufficient to confirm a negative FMD result.

Whilst the Group requested the results of the active follow-up surveillance performed on the outbreaks of 2018, the request was misunderstood, and information was only provided with regard to passive surveillance.

The Group expressed concerns on outbreak No. 4 in the Department of Boyacá, for which Colombia concluded that the source of the outbreak was virus circulation in the previous containment zone as no other epidemiological link could be made to new introductions of FMD virus. Colombia explained its rationale for reaching this conclusion and the corrective measures taken.

With regard to the surveillance in the protection zone and HSZ, it appeared that there was no additional intensified surveillance implemented in these areas compared to the proposed FMD free zones.

The Group recommended that the random NSP and immunity surveys be supplemented by risk-based targeted surveillance.

Overall, the Group felt that the surveillance activities and results presented by Colombia supported no FMD virus circulation in the four proposed zones.

vi) Regulatory measures for the early detection, prevention and control of FMD

Colombia described its network of epidemiological sensors made up by professionals (i.e. veterinarians, veterinary zootechnicians with certified graduate or postgraduate degrees) and para-professionals (i.e. people who have completed one or two years of technical courses in livestock-related studies) in support of the early warning system. The sensors receive annual training provided by ICA on all diseases of national importance including FMD and Colombia reported that there are 5,299 sensors in the country at the time of submission.

The Group noted sufficient regulatory measures in place described in the dossier for the early detection, prevention and control of FMD, as implemented in other zones already officially recognised as free from FMD. However, the Group noted that there were movement of animals leaving Zones I, II, protection zone and HSZ to other zones in the country which could be a considerable risk that should be taken into account by Colombia, particularly the movements from the HSZ destined for farms and markets.

From the additional information received by Colombia, the Group recognised that there were limited movements of live animals from the protection zone to the proposed zones and the requirements were in accordance with the provisions of Article 8.8.12. of the *Terrestrial Code*. However, regarding the movements from the HSZ to the proposed zones, the Group did not find supportive evidence demonstrating full compliance with the provisions of Chapter 8.8. of the *Terrestrial Code*.

Colombia stated that individual identification of cattle and buffalo was mandatory in the HSZ since 2010 by resolution and will become mandatory in Zones I and II as part of the legislation on implementation of border control and control posts that was to be issued on 13 November 2019. For the protection zone, individual identification is required only for animals to be moved to the proposed free zones. For the other zones, FMD susceptible animals have group identification by branding. Whilst the Group noted that individual identification is not a mandatory requirement, the Group had concerns that the brand identification system currently in place in the country may not be sufficient to rapidly identify the origin of individual animals.

vii) Description of the boundaries of the proposed free zone

Zone 1. Located in the north of Colombia, this zone comprises the Departments of La Guajira and Cesar, and includes the municipalities of Abrego, Cáchira, Convención, El Carmen, Hacarí, La Esperanza, La Playa, Ocaña, San Calixto, Teorama and Villacaro of the Department of Norte de Santander (Figure 1). This zone shares borders with Venezuela. There is a mountain range that acts as a natural barrier separating the Departments of La Guajira and Cesar from Venezuela.

Zone II. The zone II is constituted by the departments of Arauca and Vichada and the municipality of Cubará of the department of Boyacá, with the exception of the HSZ located along a 15 km wide strip inside the country along the border with Venezuela.

Zone III. This zone is separated from the free zone where vaccination is practised as it is the main zone for the country's export activities in livestock products. It is formed by the Departments of Atlántico, Córdoba, Sucre, Magdalena and some municipalities of the Departments of Antioquia, Bolivar and Choco.

In Zones II and IV, where it directly borders Venezuela, Colombia informed that the forest and the Orinoco River basin act as natural barriers.

Zone IV. This zone includes the Departments of Amazonas, all municipalities of Departments of Antioquia and Bolívar (excluding those located within the Zone III), of Boyacá (excluding the municipality of Cubará), Caldas, Caquetá, Cauca, Casanare, Chocó (all municipalities excluding those located in Zone III and those part of the zone free from FMD where vaccination is not practised), Cundinamarca, Guainía, Guaviare, Huila, Meta, Nariño, Quindío, Putumayo, Risaralda, Santander, Tolima, Valle del Cauca and Vaupés.



Figure 2. Proposed FMD free zones [4] where vaccination is practised in Colombia for potential recognition in May 2020.

In order to control the movement of FMD susceptible animals in the national territory and according to the differentiated strategy in the four zones, two resolutions were issued by ICA: the first one that dictates the provisions that must be complied with in the Zones I and II and the second, which establishes the conditions for Zones III and IV.

viii) Description of the boundaries and measures of a protection zone, if applicable

Colombia confirmed its maintenance of the previously established protection zone bordering a neighbouring country without an official FMD free status and between Zones I and II, as well as the HSZ formed by a 15-km wide strip between Zone II and the border with Venezuela. The protection zone and HSZ are not included as part of any of the proposed free zones.

ix) Description of the system for preventing the entry of the virus

The Group noted the strategy implemented to address the illegal entry of animals and agricultural products into Colombia (*cf* Section ii) of this report) where Colombia's Veterinary Service is part the CIIP.

The dossier described the distribution of ICA inspection posts at the boundaries and inside the proposed zones, as well as the locations of the CIIP. However, the Group noted that not all inspection posts were in place, with some planned. Colombia reported that the legislation on implementation of border control and control posts was to be issued on 13 November 2019 and all control posts would be implemented by June 2020. The Group underlined that all measures should be implemented, and documented evidence should be provided on the effectiveness prior to application for official recognition by the OIE.

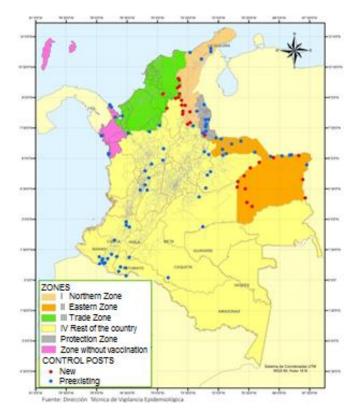


Figure 3. Control posts – existing (blue) and planned (red).

Regarding imports, there were no entries of FMD susceptible animals into the proposed FMD free zones. The Group acknowledged that imports of animal products were only from countries or zones recognised by the OIE as free from FMD.

x) Compliance with the questionnaire in Article 1.11.4.

The Group agreed that the format of the dossier was compliant with the questionnaire in Article 1.11.4.

Conclusion

While the Group noted comprehensive information and supportive data on preventive and surveillance activities carried out by Colombia, the Group was concerned about the control of movements between the proposed zones as well as about the illegal movements and the feasibility of the maintenance of a FMD free status particularly in Zones I and II bordering a neighbouring country with an undetermined FMD status risk. The Group felt that it was not in a position to make a final decision and while noting that a mission was planned to be deployed at the end of November 2019, the Group raised some points for the mission to verify (in addition to the ones mentioned within the sections above):

- System for prompt detection, reporting and follow-up of FMD suspicions.
- Documented evidence substantiating proper movement control of all FMD susceptible animals and their products into the proposed zones and between them despite incomplete implementation of certain measures (e.g. operational control posts, legislation pending approval and enforcement, individual animal identification, etc.)

- Clear procedures and immediate actions (e.g. destruction and disposal) to be taken upon detection of any illegal movements of FMD susceptible animals and their products.
- Whether the use of protection zone and HSZ in Colombia is in accordance with Article 4.4.6. of the *Terrestrial Code*.
- Whether the more frequent vaccination planned in Zones I and II would also apply to the protection zone and HSZ.